

Introduction to Animal Assisted Interventions

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and dog handlers



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Warsaw 2019

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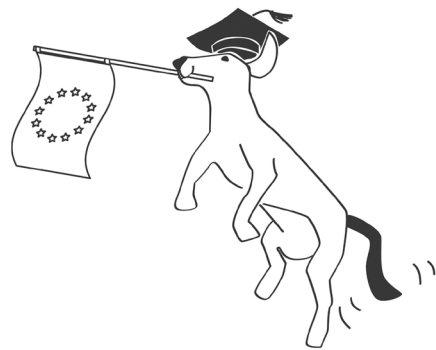
From the authors

The field of animal-assisted interventions is growing fast and is reflected in many disciplines. Practitioners such as psychologists, remedial educationalists, educational generalists, nurses, social workers, medical doctors, speech therapists, physiotherapists and occupational therapists are all involved in this work. The differences in the background of the professionals, as well as the (cultural) differences between countries, pose challenges in quality standards and training models for AAI practices all over Europe. For quality standards to be embraced by all, consensus is needed, for example about what is required to be a qualified volunteer or professional in AAI.

The first Handbook (Animal Assisted Activities with Dogs. Guideline for basic requirements & knowledge), a product of an European Erasmus+ project in 2016, addressed the basic training requirements for volunteers that prepare themselves and their dogs to be a visiting team for animal-assisted activities, as well as individuals that want to partner with their trained dog, as a handler, in animal-assisted interventions supervised by a professional therapist, education professional, coach or counsellor.

This Handbook, also the product of an European Erasmus + project, addresses professionals who, in addition to their 'normal' professional knowledge and expertise, need specific training and knowledge in the field of animal-assisted interventions, when working with their own dog or working alongside a dog handler

and their dog. The interventions can be AAA (animal-assisted activities), AAT (animal-assisted therapy) or AAE or AAC, (animal-assisted education or animal-assisted coaching or counselling), but the focus here is specifically on animal-assisted therapy and animal-assisted education.



Dog handlers also need specialist knowledge and expertise to work as an effective team with the professional to deliver safe and effective interventions.



For this reason, and building on the first Handbook, we have included advanced, in-depth information on many aspects of dogs, as relevant in AAI settings, such as dog behaviour and training. This will be of particular importance for dog handlers but is also relevant for professionals working alongside, to enhance their understanding of the requirements of dogs in AAI.

To safeguard the well-being of clients/participants/patients in the therapy, educational or coaching/counselling programmes and to optimise the effects of AAI, a thorough knowledge of animal behaviour, zoonoses and animal well-being as well of best practices in AAI is necessary, alongside the professional knowledge and expertise of the practitioners. Expertise needs to be developed in different situations, different training methods, the choice of breeds and knowledge about the best fit between client and dog.

Based on the White Paper of IAHAIO (International Association of Human-Animal-Interaction Organizations, version 2018) and the latest research findings in the field this Handbook provides an overview of how animals impact human health as well as how humans impact animal health in AAI. AAI with dogs, and the interaction with several client groups, is described, as well as legal issues that may need to be considered. The Handbook discusses how to implement AAI in facilities and how to protect the well-being of clients and dogs in the interventions.

Extensive information about dogs in the context of AAI is provided, including topics such as socialisation, communication and signals of dogs, the behavioural development and problem behaviour of dogs, the theory behind training methods, the importance of the relationship between dog and handler (professional) and the specific features of different locations where AAI may take place.

Please note that for the purposes of this Handbook, we refer to the recipients engaged with AAI programmes interchangeably as ‘clients’, ‘patients’ or ‘pupils’, as this reflects the diversity of groups and individuals in AAI, ranging, for example, from pupils in a school setting, patients in a hospital setting and clients in a counselling or rehabilitation setting.

The Handbook will be complemented by e-learning sessions and by practice sessions.

CHAPTER 1.

Introduction to animal-assisted interventions

Prepared by prof. Marie-José Enders-Slegers and Tynke de Winkel



Background to development of this Handbook

In Europe the field of animal-assisted interventions (AAI) has developed in a very expansive way over the last few decades. Many new organizations in different countries have emerged, new fields have been explored and efforts have been made to emphasize the necessity and importance of good education for professionals, volunteers and animals involved in AAI.

A global taskforce of experts in the field, directed by IAHAIO (International Association of Human-Animal Interaction Organizations), reached consensus about definitions. In 2014 IAHAIO published its White Paper: **Definitions for Animal Assisted Interventions and Guidelines for Wellness of Animals Involved** and recently (2018), additions were published (www.iahaio.org). This was helpful in the field to gain more mutual understanding and transparency in methodologies for training humans and dogs for animal-assisted interventions. Dogs involved in AAI need to be trained for their own safety and that of the clients. The handlers need to learn about animal behaviour and emotions, about positive training, about animal well-being, zoonoses, ethics, legalities, institutional rules and, of course, about how to work with the dogs and the vulnerable populations that participate in their programmes.

There is a broad range of activities, carried out by many organizations, that are defined as animal-assisted interventions. Some providers of AAI claim that all interventions have therapeutic value and the interventions are often called “animal-assisted therapy” which in many cases, they are not. Experience also shows that there is often a lack of competence, knowledge and expertise in workers in this field, which may result in critical and dangerous situations for the clients as well as the animals involved.

Since there are no mandatory quality standards and accreditation is often executed by the own organization, the difference in quality and nature of the interventions undertaken by different organizations and across different countries, can be vast.

In Europe a first Erasmus+ project ‘Therapy Dog Training- European Standards’ about animal-assisted interventions was carried out (2014-2016), focusing on the training of dogs and handlers in animal-assisted interventions, with emphasis mostly on animal-assisted activities (AAA). This resulted in the publication of a booklet, available freely online:

‘Animal Assisted Activities with Dogs, Guideline for basic requirements & knowledge’.

This booklet was a first step in educating handlers (professionals as well as volunteers) on how to train their dogs and how to carry out interventions with trained dogs and clients.

In this Handbook, the focus of the second Erasmus project about AAI, the emphasis is on the education of professionals, working with dogs, carrying out animal-assisted therapy (AAT) or animal-assisted education (AAE) (Pedagogy) and on the advanced education of handlers assisting professionals in AAT and AAE.



Download and read basic handbook: "Animal Assisted Activities with Dogs, Guideline for basic requirements & knowledge"

Definitions

Animal-assisted therapy is defined as a goal-oriented, planned and structured therapeutic intervention directed and/or delivered by health, education and human service professionals. Intervention progress is measured and included in the professional documentation. AAT is delivered and/or directed by a formally trained (with active licensure, degree or equivalent) professional with expertise within the scope of the professionals’ practice. AAT focuses on enhancing physical, cognitive, behavioural and/or socio-emotional functioning of the particular human recipient. The professional delivering AAT (or the person handling the animal under the supervision of the human service professional) must have adequate knowledge about the behaviour, needs and health as well as the indicators and regulation of stress of the animals involved.

Animal-assisted education (AAE) (or pedagogy) is a goal oriented, planned and structured intervention directed and/or delivered by educational and related service professionals. AAE is conducted by qualified (with a degree) general and special education teachers. AAE, when delivered by special (remedial) education teachers, is also considered therapeutic and a goal-oriented intervention. The professional delivering AAE, including regular school teachers (or the person handling the animal under the supervision of the education professional), must have adequate knowledge about the behaviour, needs and health as well as indicators and regulation of stress of the animals involved (definitions retrieved from www.iahaio.org, the IAHAIO White Paper, 2018).

There are a couple of ways in which AAT/AAE can be performed: with a professional, a client and an animal (client and animal supervised for their well-being and instructed by the professional – **triangle model**). Or with

a handler, client, animal and professional (**quadrangle model**), in which the handler works with the animal and the client, focusing on the well-being and behaviour of the animal. The professional therapist or educator/pedagogue designs and supervises the intervention and focuses on the well-being and behaviour of the client.

History

There is historical evidence, dating back many centuries, that human-animal interactions and animal-assisted interventions can enhance human well-being and health. The ancient Greeks (600 B.C) documented horse-assisted therapy, aiming to raise the spirits of incurably ill people. In the 17th century medical texts noted riding horseback as beneficial for gait, neurological and emotional problems. In the 18th century at the York Retreat in England, founded by the Quakers, residents were taught to manage their behaviour through care for, and interaction with, animals (poultry, rabbits). In 1860 Florence Nightingale recommended small companion animals (birds) as an adjunct to healing, especially for the chronically ill. In 1867, at Bethel in Bielefeld/Germany, animals (birds, cats, dogs and horses) were integrated into a community for people with disabilities. In the 19th century human-animal interactions were introduced in hospitals (psychiatric patients, patients with ‘shell shock’). It can be concluded that animals have played important roles in the lives of humans for many ages and that their influence on human physical and psychological well-being has been noticed and acknowledged for many centuries.

Current trends

During the past twenty years, animal-assisted interventions have become a ‘booming business’ in many countries in the world. Its development in different countries is at different stages: the inconsistent use of common definitions (White paper IAHAIO), of accredited educational programmes and of guidelines and quality standards are serious challenges for the field. Pioneers in different countries have set up programmes, standards and guidelines. However, lack of transparency, collaboration and problems around sharing knowledge and best practices jeopardize the growth of professionalism in the field of AAI.

Nevertheless, the embedding of AAT, AAE and AAA in institutions such as elderly homes, nursing homes, hospitals and educational institutions such as

Green Chimneys Brewster, New York, (<http://www.greenchimneys.org>), as well as in many other places in the world, is becoming more and more accepted. Many large organizations are working nowadays to help the field to enhance its professionalism (e.g. IAHAIO and its members, Erasmus + programmes in Europe) and are collaborating with the academic community. Research has been carried out to unravel the mechanisms (e.g. Enders-Slegers, 2013, Verheggen, Enders-Slegers, & Eshuis, 2017) and to measure the effects of AAI interventions in a scientifically sound way (Kramer, Friedmann, & Bernstein, 2009).

Companion animals and human health

Until 1983, studies about the human-animal relationship were mostly anecdotal. After this time empirical studies focused on the attitudes of people towards animals, the roles animals played in the lives of humans and on the health-promoting effects of human-animal interactions. Later research studied the influence of companion animals on physical, psychological and social well-being of humans (e.g. Enders-Slegers, 2000, O’Haire, 2010, Hart, 1995) in which positive effects of pet ownership were found, such as better mood, reduced loneliness and depression, better activity levels, fewer minor health complaints, better cardiovascular health etc. In a meta-analysis of 250 studies, the effects of animal-assisted interventions (only 45 met the inclusion criteria) were researched (Nimer & Lundahl, 2007). In the analysis AAT was associated with moderate effect sizes in improving outcomes in four areas: autism-spectrum symptoms, medical difficulties, behavioural problems and emotional well-being.

How do companion animals impact human health?

There is a growing body of evidence with scientifically well-designed and methodologically sound studies, in which positive effects are found, although the mechanisms of the interventions and the theoretical underpinnings are not yet all known (Verheggen et al., 2017). There are several aspects of the relationship that point to psychological, physiological and social mechanisms that influence the well-being of people. Explained from the attachment theory perspective, people form attachments to their pets and this can influence their emotional well-being in a ‘safe’, inter-species attachment relationship (Julius, Beetz, Kotrschal, Turner, & Uvnas-Moberg, 2013) in which they receive social support and where basic needs are met (Enders-Slegers, 2000). Physiological

mechanisms occur in interactions with animals: animals keep you fit and alert through the activities you have with them (e.g. walking, playing) (Olsen, Pedersen, Bergland, Enders-Slegers, & Ihlebæk, 2016; Friedmann, Son, & Saleem, 2015; Curl, Bibbo, & Johnson, 2017; Schofield, Mummery, & Steele, 2005) and the survival rate after heart attacks is higher (Friedmann, Katcher, Lynch, & Thomas, 1980). Moreover, heart rate and blood pressure lower when stroking an animal and oxytocin (hormone) is released, which makes people feel more relaxed and happier (Beetz, 2017; Malinowski et al., 2018). Social effects happen when, for example, walking the dog: research has found that people with dogs make more contact with other people; animals facilitate communications and help people to stay embedded in a social network (Wood et al., 2015; Knight & Edwards, 2008).

In animal-assisted interventions the specific qualities of the animals can be very helpful in achieving the therapeutic or educational goals. The animals involved should be well trained. They should behave well and in a safe way, be unconditional, non-judgmental, friendly, accepting, warm and offer physical contact.

This is something which a therapist/educator often cannot offer. As such they motivate and stimulate the clients during the interventions and, in offering physical contact, they stimulate the release of oxytocin and decrease the cortisol level in the blood of the client. They offer relaxation and pleasure: conditions for learning new skills, new behaviour, and for correcting emotional experiences during the interventions.

We are becoming more aware of animals' cognitions and animals' emotions (Panksepp, 1998) and it is a very good development that nowadays, in animal-assisted interventions, the well-being of the animals involved is observed and taken into account.

In the near future the well-being of the animal should be as important as the human well-being. The One Health Commission underlines this: "One Health is the collaborative effort of multiple health science professions, together with their related disciplines and institutions – working locally, nationally, and globally – to attain optimal health for people, domestic animals, wildlife, plants, and our



Check the One Health Commission website!

environment”. Besides, AAI with unhappy animals that don’t feel comfortable in the situation will not have the optimal results in the interventions either (Kerepesi, Kubinyi, Jonsson, Magnusson, & Miklósi, 2006).

Legal issues

When the first book of the Erasmus+ project ‘Therapy Dog Training- European Standards’ was completed some years ago, none of the participating countries had state regulations indicating how animals and humans should be treated in animal-assisted interventions and how human and animal well-being and safety should be guaranteed. Nowadays, the situation is unchanged. However, thanks to umbrella organizations like the International Society for Animal Assisted Therapy (ISAAT) and the European Society for Animal Assisted Therapy (ESSAT) and IAHAIO, definitions within the field are clearer now (White Paper IAHAIO, 2018), which means that, although there are no legal prescriptions, there are guidelines for professionals as well as for volunteers. Those guidelines state that ‘professionals’ (teachers, therapists, counsellors and coaches) need to have a professional background (diploma, license). Volunteers, most of the time, do not have a professional background. Volunteers as well as professionals need to be educated in the species they work with for the safety and well-being of humans as well as animals. Without specific animal knowledge, and specific knowledge about the human participants you work with, the well-being of both parties might be jeopardized. However, there is another reason as well. Although there is no legal regulation, the possibility that something may go wrong during an AAI session is always there and who will be held responsible for that?

In most countries legal responsibility is regulated by law, however, few professionals are aware of that. If a client gets hurt by a dog and holds the professional or handler responsible, the consequences – including financial - can be huge. In most countries it is not easy to make an insurance contract for professionals and volunteers working in animal-assisted interventions. So professionals (as well as volunteers working together with a professional) need to check if their liability insurance covers the costs if something untoward happens during the intervention. Quality standards and procedures for professionals, volunteers and animals are very helpful in minimizing the risk. Hopefully, in the near future, this field will be recognized as a fully professional and well-regulated discipline. As a consequence, it will be easier to get an insurance contract.

References:

- Beetz, A. M. (2017). Theories and possible processes of action in animal assisted interventions. *Applied Developmental Science*. <https://doi.org/10.1080/10888691.2016.1262263>
- Curl, A. L., Bibbo, J., & Johnson, R. A. (2017). Dog Walking, the Human-Animal Bond and Older Adults' Physical Health. *Gerontologist*, 57(5). <https://doi.org/10.1093/geront/gnw051>
- Enders-Slegers, M.-J. (2000). The meaning of companion animals: Qualitative analysis of the life histories of elderly cat and dog owners. In *Companion animals and us: Exploring the relationships between people and pets* (pp. 237–256).
- Enders-Slegers, J.M.P. (2000). *Een leven lang goed gezelschap*.
- Enders-Slegers, M.-J. (2013). Antrozoölogie (over) leven met dieren.
- Friedmann, E., Katcher, A. H., Lynch, J. J., & Thomas, S. A. (1980). Animal companions and one-year survival of patients after discharge from a coronary care unit. *Public Health Reports*. <https://doi.org/10.2307/4596316>
- Friedmann, E., Son, H., & Saleem, M. (2015). The animal–human bond: Health and wellness. In *Handbook on Animal-Assisted Therapy (Fourth Edition)* (pp. 73–88). Elsevier.
- Hart, L. A. (1995). Dogs as human companions: a review of the relationship. *The Domestic Dog: Its Evolution, Behaviour and Interactions with People*, 161–178.
- Julius, H., Beetz, A., Kotschal, K., Turner, D., & Uvnas-Moberg, K. (2013). Attachment to Pets. An Integrative View of Human-Animal Relationships with Implications for Therapeutic Practice. Cambridge, MA: Hofgreve.
- Kerepesi, A., Kubinyi, E., Jonsson, G. K., Magnusson, M. S., & Miklósi, Á. (2006). Behavioural comparison of human-animal (dog) and human-robot (AIBO) interactions. *Behavioural Processes*, 73(1), 92–99. <https://doi.org/10.1016/j.beproc.2006.04.001>
- Knight, S., & Edwards, V. (2008). In the Company of Wolves. *Journal of Aging and Health*, 20(4), 437–455. <https://doi.org/10.1177/0898264308315875>
- Kramer, S. C., Friedmann, E., & Bernstein, P. L. (2009). Comparison of the Effect of Human Interaction, Animal-Assisted Therapy, and AIBO-Assisted Therapy on Long-Term Care Residents with Dementia. *Anthrozoos*, 22(1): 43-57. <https://doi.org/10.2752/175303708x390464>
- Malinowski, K., Yee, C., Tevlin, J. M., Birks, E. K., Durando, M. M., Pournajafi-Nazarloo, H. & McKeever, K. H. (2018). The Effects of Equine-Assisted Activities Therapy on Plasma Cortisol and Oxytocin Concentrations and Heart Rate Variability in Horses and Measures of Symptoms of Posttraumatic Stress Disorder in Veterans. *Journal of Equine Veterinary Science*, 64. <https://doi.org/10.1016/j.jevs.2018.01.011>
- Nimer, J., & Lundahl, B. (2007). Animal-assisted therapy: A meta-analysis. *Anthrozoos*, 20(3), 225–238. <https://doi.org/10.2752/089279307X224773>
- O'Haire, M. (2010). Companion animals and human health: Benefits, challenges, and the road ahead. *Journal of Veterinary Behaviour: Clinical Applications and Research*. <https://doi.org/10.1016/j.jveb.2010.02.002>
- Olsen, C., Pedersen, I., Bergland, A., Enders-Slegers, M. J., & Ihlebæk, C. (2016). Effect of animal-assisted activity on balance and quality of life in home-dwelling persons with dementia. *Geriatric Nursing*, 1–8. <https://doi.org/10.1016/j.gerinurse.2016.04.002>
- Panksepp, J. (1998). *Affective neuroscience: The foundations of human and animal emotions*. New York: Oxford University Press.

Schofield, G., Mummery, K. & Steele, R. (2005). Dog ownership and human health-related physical activity: an epidemiological study. *Health Promotion Journal of Australia*, 16(1), 15–19.

Verheggen, T., Enders-Slegers, M.-J. & Eshuis, J. (2017). Enactive Anthrozoology Toward an integrative theoretical model for understanding the therapeutic relationships between humans and animals.

Wohlfarth, R., & Sandstedt, L. (2016). *Animal Assisted Activities with Dogs – Guideline for basic requirements & knowledge*. Publishing House of Janusz Korczak Pedagogical University in Warsaw Erasmus Plus project.

Wood, L., Martin, K., Christian, H., Nathan, A., Lauritsen, C., Houghton, S., McCune, S. (2015). The pet factor - Companion animals as a conduit for getting to know people, friendship formation and social support. *PLoS ONE*, 10(4). <https://doi.org/10.1371/journal.pone.0122085>

CHAPTER 2.

Dogs in animal-assisted interventions

Prepared by Magdalena Nawarecka and Line Sandstedt



AAI with dogs in institutions

There are many possibilities for facilities to implement animal-assisted interventions in their organizations.

Some of these are outlined in this chapter.

There are some rules that should be adhered to when delivering animal-assisted interventions in all types of facilities. It is important to remember that the facility should implement AAI in their protocols and regulations.

Here are some tips that should be considered if you are delivering AAI in a facility with your dog:

- » 1. Clear rules of the intervention: The facility is full of people who need your help and support and who would be delighted with a dog's visit or the possibility to be a part of the intervention. It is very important to set the rules at the beginning. Your dog cannot handle interventions and visits for all of the patients. Prepare an agreement carefully and include statements about:
 - a. how long will the intervention last?
 - b. how many patients will be taking part?
 - c. where will the intervention take place (and is it a nice place for the dog?)
 - d. rules for the staff – are they supposed to meet, pet and touch the dog?
 - e. help from the staff – do you need personnel to be present during your visit to the facility? How many of them? (it depends on many factors: your education, disabilities of patients, kind of AAI, etc.)
 - f. days for the visits, hours of interventions and breaks for the dog, the monthly/annual schedule – taking holidays for the dog into account, etc.

- » 2. Remember the importance of the dog's welfare. For example: if the dog is working for an hour (on the intervention), and half an hour before (as it meets people at the corridor)and another half an hour after (greeting inhabitants while leaving) – this should be considered as two working hours, without a break! The corridor may also be more difficult for the dog, as the rules are much less predictable, and the handler has fewer options to control the environment.

- » 3. Remember the patient's welfare. For example, even if you have met this patient/client before, it is still nice to introduce yourself and the dog and to ask if they would like to participate in the meeting and greet the dog. Some of them may forget about the timetable and they will be surprised that you are there; some may not be in the mood to see a dog or they may suffer from health issues. Sometimes a dog may help in such situations, but not always, so it is polite to ask patients about their decision.
- » 4. Ensure good training for the dog before the intervention – a care home is full of difficult equipment and machines. It would be much easier for the dog if it could become familiar with all of this before a visit. It is good to use wheelchairs, crutches, walkers, etc. and helpers during the training. Helpers can also simulate different patients' behaviours, so the dog can get used to them.

Dogs in hospitals

Every year a lot of people are hospitalized. This can be difficult, especially for children. Being hospitalized, combined with 'fighting' the physical or psychological problems, can be the source of extra fear and pain. Is it possible that interactions with a dog can have a positive effect on human's health and recovery process? Can it decrease anxiety and make the medical procedures less painful and traumatic?

In the published literature, there is much evidence that a dog's presence or an animal-assisted intervention with a dog may have positive effects on human health. Intervention with the animal can improve physical, emotional and social functioning, blood pressure level, reduce pain, and morbidity and also lessen stress in psychiatric patients. (Wisdom, Saedi & Green, 2009, Friedmann, Katcher, Lurch et al., 1980, Barker) (see chapter: Introduction to animal-assisted interventions).

Think about it

Animals' presence in hospitals can, however, be controversial. Some might tend to think about dirt, bites, allergies and pathogens.



But that's not always the case. Studies conducted in 2012 in the USA tested the acceptance of AAT in an emergency department and showed that 93% of patients and staff approved of the idea.(Nahm, Lubin, Lubin, Bankwitz, Castelaz, Chen, Shackson, Aggarwal & Totten, 2012)

Introducing animal-assisted interventions with dogs in medical departments is complicated. Different countries have different legal principles. In the USA there are a lot of programmes which give patients an opportunity to interact with animals. In Poland, there are a lot of polyclinics, mostly for children, that allow sessions with dogs and other animals. There are also other European programmes where animals are embedded, for example, the Children's Hospital Sant Joan de Deu in Barcelona (Spain), the Clinic for Neurohabilitation in Basel (Swiss), the Otto Wagner Spital in Vienna (Austria) and the Academic Hospital in Maastricht (children's ward) in the Netherlands.

To organize a quality session of AAT in a hospital, we have to consider the benefits and the risks relating to patients, handlers and dogs.

First of all the handler needs to be educated about how to approach different patients. Secondly, the dog needs to be trained in a positive way and should like the 'work' in the hospital. The handler and the dog should be a good team, well attuned to each other, so that handler and dog recognize each other's signals and patients and dogs are safe in the interactions.

Risks for AAT in hospitals include:

- **Transmission of handler's pathogens**

The handler should be in good health. He/she needs to be aware of the health precautions associated with visiting polyclinics or hospitals and respect individual recommendations to protect both parties. He/she should also clean hands thoroughly before and after each session.

- **Transmission of zoonotic diseases especially for those patients who are immunocompromised.**

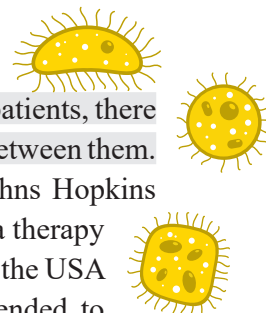
When the dog is healthy, properly vaccinated and wormed the risk of transmission of zoonotic diseases is rather low. If the dog is under regular veterinarian care and patients adhere to the hand-washing protocol before and after contact with the dog, the risk is minimized. Special attention must be paid to the dogs after vaccination that contains live, attenuated, freeze-dried B.

bronchiseptica and canine parainfluenza virus. It can be potentially dangerous for the immunocompromised patient. There should be 6-8 week break from visiting hospitals after vaccination.

Pathogens transmission between patients

When the dog, while visiting patients in the hospital, is petted by patients, there is a potential risk of transmitting antimicrobial-resistant bacteria between them.

Recently (2018), a limited unpublished study, conducted by Johns Hopkins Bloomberg School of Public Health, found that being visited by a therapy dog increased the risk of transmitting MRSA between patients. In the USA the Society for Healthcare Epidemiology of America recommended to bath the animal 24-48 hours before the visit, to exclude ill animals, especially with wounds and skin problems and to wash the hands of patients before and after contact with a dog. In our opinion using disposable towels or sheets to avoid direct contact with the patient's environment will also help.



Dog bites and accidents

Risk of such accidents can be minimized by careful selection of the dogs and proper, positive training.

Allergy to dogs, phobia of dogs, religious or cultural reasons to avoid interactions

Every person, for whatever reason, has a right to refuse to meet a dog. It is essential to make sure that the person we intend to visit wishes to have a dog visiting.

Regarding allergy, you can read more about how to facilitate your interventions in the book *Animal Assisted Activities with Dogs - Guideline for basic requirements & knowledge* (2016).

Animal welfare

For the dog, the hospital environment is challenging. Temperature, noises, smells, medical equipment and possible contact with physiological secretions or medicines are challenging factors for the dog to deal with. The handler should be aware of the dog's endurance and adjust the length, intensity and frequency of sessions accordingly. After the interaction, it needs adequate rest. The dog should be well-trained and familiar with the medical environment.

References

- Barker SB, Dawson KS. The effects of animal-assisted therapy on anxiety ratings of hospitalized psychiatric patients. *Psychiatr Serv.* 1998;49:797–801.
- Friedmann, E., Katcher A.H., Lynch, J.J. & Thomas, S.A. Animal companions and one-year survival of patients after discharge from a coronary care unit. *Public Health Rep.* 1980;95:307–312.
- Nahm, N, Lubin, J, Lubin, J., Bankwitz, B.K., Castelaz, M., Chen, X., Shackson, J.C., Aggarwal, M.N. & Totten, V. Therapy Dogs in the Emergency Department *West J Emerg Med.* 2012 Sep; 13(4): 363–365. doi: 10.5811/westjem.2011.5.6574
- Murthy, R., Bearman, G., Brown, S., Bryant, K., Chinn, R., Hewlett, A., George, B.G., Goldstein, E. J., Holzmann-Pazgal, G., Rupp, M.E., Wiemken, T., Weese, S. & Weber, D.J. (2015). Animals in healthcare facilities: recommendations to minimize potential risks. *Infection Control & Hospital Epidemiology*, 36(5), 495-516. doi: 10.1017/ice.2015.15
- Olsen, C., Pedersen, I., Bergland, A., Enders-Slegers, M. J., & Ihlebæk, C. (2016). Effect of animal-assisted activity on balance and quality of life in home-dwelling persons with dementia. *Geriatric Nursing*, 1–8. <https://doi.org/10.1016/j.gerinurse.2016.04.002>
- Wisdom, J.P., Saedi, G.A. & Green, C.A. Another breed of “service” animals: STARS study findings about pet ownership and recovery from serious mental illness. *Am J Orthopsychiatry.* 2009;79:430–436.
- Woolfrey, B.F. & Moody, J.A. Human infections associated with *Bordetella bronchiseptica*. *Clin Microbiol Rev.* 1991 Jul; 4(3): 243–255.

Dogs in care homes/institutions

Residents of care homes are mostly people who are not able to live on their own or with the support of their family. Patients often not only need rehabilitation or special treatment, but also different kinds of therapy. They can feel lonely, surrounded by strangers in a non-familiar environment, often with rules and practices that they do not understand. Quite often they are also depressed, as a result of loneliness and the lack of friendly and satisfying social interactions. Dogs, during nicely prepared visits and interventions, may help to reduce loneliness, improve mood and motivate patients to start different activities. Some of the patients need extra motivation to exercise during rehabilitation or take part in a therapy meeting. But some of them may also need the motivation to stand up from their bed, take care of themselves or leave their room.

Research and observation show that interventions with dogs can be very useful in these kinds of facilities. Some examples include:

- Lower depression, higher quality of life and better balance (Olsen et al. 2016)
- Reduction of loneliness in older adult residents in long-term care facilities (Banks & Banks, 2005)
- Improved social functioning:
 - o in older adults with schizophrenia (Barak, Savorai, Mavashew & Beni, 2001)
 - o more initiation and participation in longer conversation in elderly residents of care facilities (Barnstein, Friedmann, & Malaspina, 2000)
 - o more verbal interaction among the group of older male residents in a nursing home (Fick, 1993)
 - o more social interactions in the presence of a real dog than a person/therapist (only in female nursing homes residents) (Kramer, Friedmann & Barnstein, 2000)
- Reduction of the perceptible pain in the presence of a dog (Lust, Ryann-Hauddad, Coover, Snell, 2007)

There is also research to show that interventions with dogs in nursing homes have success where other therapies fail (Kongable et al., 1989; Verderber, 1991). The dog becomes a social catalyst and makes social interaction (with staff and other patients) much easier.

AAI can be a way of changing problematic behaviour in patients as well. In the presence of animals, patients are motivated to wake up, get dressed or even eat a meal independently. Motivation and positive emotions that animals bring into the facility are often very useful tools.

References

- Banks, M. R., & Banks, W.A. (2005) The effects of animal-assisted therapy on loneliness in an elderly population in long-term care facilities. *The Journal of Gerontology. Series A, Biological Sciences and Medical Sciences*, 57, M428-M432
- Barak, Y., Savorai, O., Mavashev, S., & Beni, A. (2001). Animal-assisted therapy for elderly schizophrenic patients. *American Journal of Geriatric Psychiatry*, 9(4), 439-442.
- Bernstein, P. L., Friedmann, E., & Malaspina, A. (2000). Animal-assisted therapy enhances resident social interaction and initiation in long-term care facilities. *Anthrozoös*, 13(4), 213-224.
- Fick, K.M. (1993) The influence of an animal on social interactions of nursing home residents in group setting. *American Journal of Occupational Therapy*, 47, 529-534.
- Kramer, S.C., Friedmann, E. & Barnstein, T.P.L. (2009). Comparison of the effect of human interaction, animal-assisted-therapy and AIBO-assisted therapy on long-term care residents with dementia, *Anthrozoös*, 22, 43-47.
- Kongable L.G., Buckwalter K.C., Stolley J.M. (1989) The effects of pet therapy on the social behavior of institutionalized Alzheimer's clients. *Archives of Psychiatric Nursing* 191-8.
- Lust, E., Ryan-Haddad, A., Coover K. & Snell J. (2007) Measuring clinical outcomes of animal-assisted therapy: impact on resident medication usage. *Consult Pharm.* 2007 Jul; 22(7):580-5.
- Olsen, C., Pedersen, I., Bergland, A., Enders-Slegers, M. J., & Ihlebæk, C. (2016). Effect of animal-assisted activity on balance and quality of life in home-dwelling persons with dementia. *Geriatric Nursing*, 1–8. <https://doi.org/10.1016/j.gerinurse.2016.04.002>

Dogs in schools - animal-assisted education



It is becoming more and more popular to bring dogs into classrooms. The idea of bringing animals into schools is supported by early childhood theorists such as Vygotsky, Piaget and Montessori (Mooney, 2013). But we should bear in mind that there has been little research on the pedagogical impact of live animals in school settings (Gee, et al. 2017). Edenburg & Van Lindt (2011) discussed whether children will learn more and remember better if they are emotionally engaged in the “subject”, and that meaningful relations are important for learning outcomes for children.

There are several ways of including a dog in an education setting. In some schools the dogs are in the classrooms; having an animal in the group will change the dynamic in the group and enhance the possibilities for learning (see chapter: Relationships in animal-assisted interventions). **We must emphasise**

that having a dog in the classroom the whole day is very challenging for the dog and for the teacher/handler. The dog will have a lot of interactions and it needs a place to relax and a safe base away from the children. Dogs need a lot of sleep and it is hard for them to get enough rest if there is a lot going on around them.

In Norway most of the dogs in schools are working in special needs education; they work one to one or in small groups. The AAE team often has their own room and the dog has a safe haven where it can retire and rest between classes. These dogs are sometimes brought in to ordinary classrooms, but that is often for a short time and/or for a specific purpose. This is often the best way of including dogs in schools, taking into consideration the dog's welfare and respect for pupils and others that may be afraid of dogs or allergic to them. Some "school dog teams" work with children who have difficulties going into school, by picking them up in the morning and accompanying them to school. There are also dogs that are mainly working outside in the schoolground when the children have their recess, working with specific children or working with the relationships between children and their fellow pupils or the relationships between children and their teachers. In a Norwegian master thesis, Sigrid M. Evensen emphasizes the impact AAE has on the relationships between all participants in the educational setting - how the dog can help make a strong and safe relationship between pupil and teacher and between the children in school (Evensen, 2018). Research shows that the relationship with the teacher and between fellow pupils affects their well-being, and social and academic learning (Drugli, 2012). Gee et al. (2017) also showed that animals can improve these relationships.

Practitioners often point out the increase in motivation that dogs often bring to learning situations. Interacting with animals activates the experiential/sensory system (smell, action, touch, sights) and Wohlfarth et al. (2014) suggest that this is why animals trigger implicit motivation and enjoyment in children. Biophilia can be an explanation for why animals have this effect. The Biophilia hypotheses states that humans have an innate tendency to seek connections with nature and other forms of life (Wilson, 1986). Being with animals often helps people to stay focused; animals are in the present, "here and now", and that can facilitate children's focus in school situations (Van Fleet & Faa-Thompson, 2017).

Many children experience a lot of stress and anxiety connected to school. For some children this anxiety and stress prevents them from going to school and/or is a hinder for academic improvements. AAE teams can provide social support to pupils. Social support can make children feel that they are loved, that they are unconditionally accepted, esteemed and interconnected (Melson & Fine, 2015). Sometimes we see that AAE teams can help children to feel safer and less stressed going to school. Social support can make people more positive regarding their thoughts, behaviour and feelings (Cohen, 1988). Negative emotions such as anxiety, shame, hopelessness and boredom are found to be negatively correlated with achievements (Villavicencio, 2011). Through AAE, we can also work with self-efficacy in the school setting. Low self-efficacy in school will have a negative influence on motivation, achievement and ambition. The best way of getting higher self-efficacy is the feeling of mastery (Bandura, 1994). Low self-efficacy, negative thinking and limited problem solving are some of the risk factors found for school refusal (Ingul et al. 2019). By facilitating learning, training, playing and problem solving in AAE, teachers/handlers can help the child to succeed, and the child can get the feeling of mastery in the situation. The tasks need to be challenging enough to keep the child's interest, but not so difficult that the child becomes frustrated. Being with dogs can also give children the opportunity to explore power and control and learn appropriate behaviour in these areas. Children will develop their own capacity to learn new things through teaching the dog new behaviours (Van Fleet & Faa-Thompson, 2017). We experience that most children, by training dogs and reflecting about it afterwards, develop a higher tolerance for making mistakes and they get a higher motivation for practicing. Some children are so afraid of making mistakes, that they don't do anything. For these children we see big changes when they are working with dogs. Dogs make mistakes and when that happens, nobody laughs or criticizes the dog. We encourage the children to try to help the dog to understand what they want it to do, and we talk about making mistakes and not coping as being part of life, and that everyone must practice if they want to get better. All of us, both dogs and people, have things that are easy to learn and other things that are more challenging for us. The only thing that we know for sure is that everyone has to practice learning new skills. After some time, the children feel safe enough to start to practice on both their academic and/or social challenges.

We all have different ways of learning, different learning styles. In ordinary schools, children with visual and aural learning styles often have an advantage; being with dogs in AAE will also benefit children with more tactile and/or kinesthetic learning styles (Van Fleet & Faa-Thompson, 2017). In practice we see that children, through training and playing with the animals, are active in the learning situation, by planning, structuring and setting goals. This gives them increased competence in various subjects, both academic and social. The exercises they do with the dog can include retrieving letters, doing reading paths, having rebus with the dogs, teaching the dog a new exercise etc. By doing this the children learn to follow a plan and ultimately evaluate their own achievements. As early as the 19th century Dewey put forward his “learning by doing and reflecting” theory, where he emphasized the importance of being active in the learning process and reflecting about the process afterwards (Giles & Eyster, 1994).

We also teach the children the dog’s body language and how to interpret the dog’s feelings. Some children have problems with communication and interacting with a dog gives them a lot of opportunities to explore the sometimes threatening world of feelings (Van Fleet & Faa-Thompson, 2017). This allows the children to practice their own communication and to read the response from the dog. It is often less scary to explore these things together with a dog that will love you and forgive you, no matter how good/bad you are at doing it. The immediate response the children get from the dog, has a big influence on the child’s behaviour in the situation and in similar situations later in life. This is one of the effects that Van Flee & Faa-Thompson (2017) talk about in the animal-assisted play therapy setting, that clients, by playing with an animal, gain experiences in changing behaviours and the effect that this has on others.

Even though there has been little research in these areas, the observed effects are that interactions with dogs will help children to become better readers, to master mathematics better, to become more interested in science and even more motivated for physical exercise. Regarding reading dogs there are some studies that suggest that dogs can help pupils with their reading skills, but we need more published research with larger sample sizes before we can argue that dogs in general help children with their reading accomplishments (Gee et al. 2017). Dogs can, as we have written earlier in this chapter, help children

with their implicit motivation; they can give the child social support and reduce stress, all of which can have an effect on reading skills. Le Roux et al. (2014) concluded that a dog-assisted reading programme, such as R.E.A.D. helps children to read better, but it is important that children have some basic reading skills to observe this effect. If the child has insufficient reading skills, a teacher is crucial to help support the dog-assisted learning (Gee et al 2017).

When it comes to executive disorders such like ADHD, autism spectrum disorders (ASD) and oppositional defiant disorder (ODD) (the most commonly occurring mental health disorders of children in ordinary schools), we have very little research on the effects of implementing AAE with these children. At the same time teachers and handlers talk about the great effect the dog can have, particularly with these groups of children. We need more research on this topic, but meanwhile, we can probably assume that it works just the same way with these children as it does with other people and other children.

Maybe one of the most important factors and one that we tend to forget when we try to explain the working mechanisms of AAE, is the importance of having something to look forward to and to have something that really brings out the positive emotions in the children. Often these children have very troubled feelings about school and the AAE is the only glimmer of light they have during their days at school.

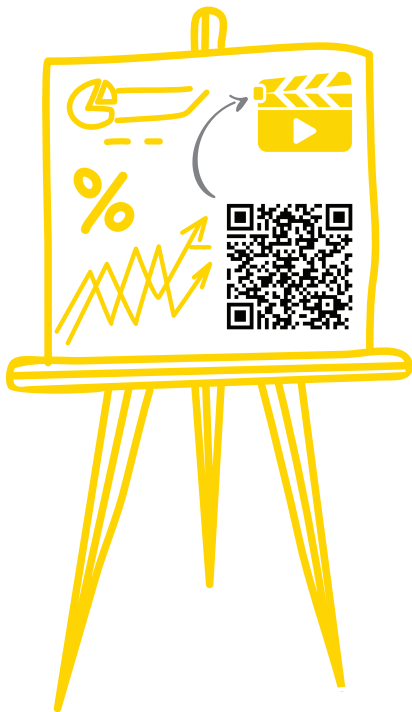
The Norwegian Centre of Anthrozoology (NCofA) has a long tradition of working with animal-assisted education. Pupils who struggle in school because of various challenges come to the centre to have an alternative school day. The days are adapted to each child's needs and alternates between activity and calmness, concentration/focus and creative outlet where the child manages the activity more independently.



Here is an example of an alternative school day:

	Description	Effect
Start of the day	The child meets the dog and the educator, the child and the dog have “free time” on a sofa or on pillows on the floor, we talk about the previous week and what the child is thinking about in this moment	Feeling welcome, being seen, feeling of being important, social competence and physiological effects, “here and now”- focus
Walking and grooming the dogs	When we are out walking the dogs, we talk about how important it is to read the dogs’ signals and fulfil their needs.	Social skills like respect and empathy Communication Routines/repetitive tasks Moments of joy
Dog training	The students work with the dogs, they are involved in planning, implementing and creating results. Here one can also add academic challenges in for example: <ul style="list-style-type: none"> ● Reading ● Mathematics ● Science 	Training Coping Increased competence on practical skills Pronouncements of words Awareness of own body language Increased academic competence Active learning
Shared lunch	Possibility of lunching together with the other students and staff	Interaction with others in a natural context. We have many good food experiences and good conversations around the lunch table.

Individual social and academic goals	Worki Working with the child's special needs, it can be social or academic challenges that are addressed	Social competence, increased self-confidence and self-image Fun and education, increased motivation and professional strength Security and room for difficult conversations Positive feelings and motivation for the rest of the school week
Write log	All students get their own book to write in, they write a log every time, this is done mainly by hand	Reflection on their own efforts and learning and for many of the children the only time they are practicing their handwriting
Plan for next time	Students always get an overview of what to do next time	Predictability Safety



References:

- Bandura, A. (1994). Self-efficacy. In V. S. Ramachandran (Ed.), *Encyclopedia of human behaviour* (Vol. 4, pp. 71-81). New York: Academic Press. (Reprinted in H. Friedman [Ed.], *Encyclopedia of mental health*. San Diego: Academic Press, 1998.
- Cohen, S. (1988). Psychosocial models of the role of social support in the etiology of physical disease. *Health Psychology*, Vol 7(3), 269-297.
- Dewey, J. (1916). *Democracy and Education. An introduction to the philosophy of education*. www.Gutenberg.org
- Drugli, M.B. (2012). *Relasjonen lærer og elev: avgjørende for elevenes læring og trivsel*. Oslo: Cappelen Damm høyskoleforlag
- Edenburg, N. & van Lith, H.A. (2011). The influence of animal son the development of children. *The Veterinary Journal*, 190(2), 208-216.
- Evensen, S. (2018). *Dyrebar Relasjon - Hvordan kan dyreassistert pedagogikk forbedre relasjoner i skolen*. Master Theses. UIT – Norges Arktiske Universitet.
- Gee, N.R., Fine, A.H., & McCardle, P.D. (2017). *How animals help students learn: research and practice for educators and mental-health professionals*. New York: Routledge, Taylor & Francis.
- Giles, Jr. D.E. & Eyler, J. (1994). The Theoretical Roots of Service-Learning in John Dewey: Toward a Theory of Service Learning. *Michigan Journal of Community Service Learning*, 1(1), pp. 77-85.
- IAHAIO,. (2014). IAHAIO WHITE PAPER, www.iahaio.org
- Ingul, J.M., Havik, T. & Heyne, D. (2019). Emerging School Refusal: A School-Based Framework for Identifying Early Signs and Risk Factors. *Cognitive and Behaviour Practice*, 26(1), pp. 46-62.
- Le Roux, M.C., Swartz, L. & Swart, E. (2014). The effect of animal-assisted reading programme on the reading rate, accuracy and comprehension of Grade 3 students, A randomized control study. *Child Youth Care Forum*, 43, 655-673.
- Melson, L.G., & Fine, A.H. (2015). *Animals in the life of children*. In L.G. Melson & A.H. Fine (Red.), *Handbook on animal-assisted therapy : foundations and guidelines for animal-assisted interventions* (Fourth edition). California: Elsevier.
- VanFleet, R. F.-T., Tracie. (2017). *Animal Assisted Play Therapy*. Sarasota, USA: Professional Resource
- Mooney, C.G. (2013). *Theories of Childhood: An Introduction to Dewey, Montessori, Erikson, Piaget, and Vygotsky*. Redleaf Press, 2000 – 103
- VanFleet, R. F.-T., Tracie. (2017). *Animal Assisted Play Therapy*. Sarasota, USA: Professional Resource Press.
- Villavicencio, F. T. (2011). Critical thinking, negative academic emotions, and achievement: A mediational analysis. *The Asia-Pacific Education Researcher*, 20:1, pp. 118-126
- Wilson, E. O. (1986). *Biophilia – the human bond with other species*.
- Wohlfarth, R., Mutschler, B., Beetz, A., Kreuser, F. & Korsten-Reck, U. (2013). Dogs motivate obese children for physical activity: Key elements of a motivational theory of animal assisted interventions. *Frontiers in Psychology*, 4:296.

CHAPTER 3.

**Welfare and health of dogs
in animal-assisted interventions**

Prepared by Tynke de Winkel



In the last few decades, research and practice in animal-assisted interventions (AAI) have focused mostly on the effects of AAI on human welfare and health. Little attention has been given to the effects on the welfare and health of the dogs involved in the interventions (Glenk, 2017; Hatch, 2007). Only in the last couple of years has the animal been seen more as a co-worker and partner alongside the professional/handler in the interventions. If the starting point in AAI is that the relationship must be beneficial for both species, the welfare of the animal during AAI needs to receive more attention (Grandgeorge & Hausberger, 2011). That is inevitable, considering the growing interest in and acceptance worldwide of the One Health framework. This framework takes a multidisciplinary approach to optimize the health of humans, animals and the environment (Chalmers & Dell, 2015).

Think about it

When assessing animal welfare, the challenge is that there is no universally accepted definition of what exactly is meant by animal welfare. The description of good animal welfare should be science-based, however it is culture-based as well (Fraser, 2009).



So there are many ways to define animal welfare, just as there are many ways to assess animal welfare. However, a sound, science-based welfare assessment tool that can readily be used in practice by professionals is still missing (Kiddie & Collins, 2014). Nowadays, animal welfare is considered to have both a physical and a psychological component and is more than avoiding negative welfare states (Veissier & Boissy, 2007; Boissy et al., 2007; Hemsworth, Mellor, Cronin, & Tilbrook, 2015). Welfare also has to do with the predictability and controllability of the animals' environment and with the animals' expectations of the future, which are difficult to measure (Veissier & Boissy, 2007). There are more factors influencing animal welfare and health, such as the kind of training the dog has received and the environment it has to work in (Mcbride & Montgomery, 2018, Nimer & Lundal, 2007). Methods used so far to define animal welfare are, among others, assessing body language and stress signals, measuring saliva cortisol (Ng et al., 2014) and heart rate/heart rate variability (Zupan, Buskas, Altimiras, & Keeling, 2016; Boissy et al., 2007). Although a specific instrument for measuring dog welfare is lacking, it's more

think about it

than essential that the handler/professional working together with the dog in AAE or AAT has knowledge not only about the clients, but also about the dog. That means knowledge of dog behaviour and stress signals in general (see also chapter 7 and 8 of the book *Animal Assisted Activities with Dogs Guideline for basic requirements & knowledge* (Wohlfart & Sandstedt, 2016), and more importantly, knowledge about that particular dog.

How does this dog express stress? How does this dog behave when getting tired? What is its behaviour when feeling happy? Handler and professional must be able to see when stress signals, body language and the behaviour of a particular dog show that the dog needs a break. Maybe the handler/professional even has to skip or postpone a whole session to safeguard or guarantee the welfare of the dog.

In the first book ‘*Animal Assisted Activities with Dogs-Guideline for basic requirements & knowledge*’ (Wohlfart & Sandstedt, 2016), the physical and non-physical aspects of welfare that need to be considered during AAA were described. Of course, the same is applicable to the settings of AAT and AAE. It is important to realize that the physical and mental well-being of dogs are interrelated. Stress has a large negative influence on the general physical resistance of dogs to parasites, viruses, bacteria and illness. Besides, a dog that feels ill or has pain will not behave like it normally does. Ignoring the signals means risks for the welfare of the dog and for the humans involved in the AAI setting. Handlers and professionals should notice changes in behaviour as well as changes in physical aspects of the dog (smell, way of walking, looking

and so on) and consult the vet in all cases for a health check. Also, healthy dogs need veterinarian controls on a regular basis, at least annually. A vet will check the general health and state of care, signs of illness that the owner may have missed, and will vaccinate and treat the animal against parasites.

Keeping the dog in good health is not only important because it reduces the risk of zoonoses for the humans, but also because good health will contribute to good welfare of the dog.

In a master thesis at the Norwegian University of Life Sciences in 2014, the author conducted an important piece of research called ‘*Evaluation of animal welfare in dogs working with animal assisted interventions for elderly people with dementia*’ (Barstad, 2014), which offers some useful insights about dog welfare and AAI. In this project, all dogs had been evaluated and found to have the right personality to be trained for AAI. Both dogs and owners had participated in courses and tests designed by the Norwegian Centre of Anthrozoology.

The hypotheses were:

- The dogs will show signs of typical behavioural stress responses during an intervention.
- These stress responses will decline over time, when the situation is more familiar to the dog.
- The dogs will show less focus and concentration after a session compared to before the session starts in a behavioural test.

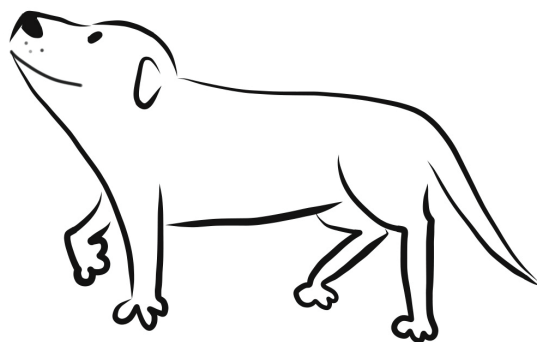
The aim of the study was to evaluate the welfare of the dogs working with AAI for older people with dementia twice a week for a period of 12 weeks.

Thirteen dogs of various breeds participated in the study. Both sexes were represented, and their ages varied between 2.5 and 13 years, with an average age of 6.1 years.

The handlers were instructed to follow a standardized plan for the sessions. Every session lasted on average 30 minutes.

- During AAI these dogs showed some signs of behaviours associated with stress and discomfort, but it was minor.
- The positive effect this activity had on human health outweighed the minor signals of stress the dogs seemed to experience.
- Well trained dogs with appropriate formal experience and training could cope with animal-assisted interventions and the challenges involved.
- The dogs in this study seemed to be confident and at ease with the job. After settling down with meeting new people and being in a new environment the job did not seem to be extremely demanding.
- The behaviours of the dogs were constant over time and the handlers reported positive observations of their dogs.
- The results from this study indicated that the welfare of dogs working with animal-assisted intervention was not compromised.

(Barstad, 2014).



References

- Barstad, B. (2014). *Evaluation of animal welfare in dogs working with animal assisted interventions for elderly people with dementia*. Master Thesis. Department of Animal and Aquacultural Sciences. Faculty of Veterinary Medicine and Biosciences. Norwegian University of Life Sciences
- Boissy, A., Manteuffel, G., Jensen, M. B., Moe, R. O., Spruijt, B., Keeling, L. J. & Aubert, A. (2007). Assessment of positive emotions in animals to improve their welfare. *Physiology and Behaviour*, 92(3), 375–397. <https://doi.org/10.1016/j.physbeh.2007.02.003>
- Chalmers, D. & Dell, C.A. (2015). Applying One Health to the Study of Animal-Assisted Interventions. *EcoHealth*, 12(4), 560–562. <https://doi.org/10.1007/s10393-015-1042-3>
- Fraser, D. (2009). Assessing animal welfare: Different philosophies, different scientific approaches. *Zoo Biology*, 28(6), 507–518. <https://doi.org/10.1002/zoo.20253>
- Glenk, L.M. (2017). Current Perspectives on Therapy Dog Welfare in Animal-Assisted Interventions. *Animals*, 7(2), 7.
- Grandgeorge, M., & Hausberger, M. (2011). Human-animal relationships: From daily life to animal-assisted therapies. *Annali Dell'Istituto Superiore Di Sanita*. https://doi.org/10.4415/ANN_11_04_12
- Hatch, A. (2007). The View from All Fours: from the Animals' Perspective. *Anthrozoos: A Multidisciplinary Journal of The Interactions of People & Animals*, 20(1), 37–50. <https://doi.org/10.2752/089279307780216632>
- Hemsworth, P.H., Mellor, D.J., Cronin, G.M., & Tilbrook, A.J. (2015). Scientific assessment of animal welfare. *New Zealand Veterinary Journal*. <https://doi.org/10.1080/00480169.2014.966167>
- Kiddie, J. L., & Collins, L.M. . (2014). Development and validation of a quality of life assessment tool for use in kennelled dogs (*Canis familiaris*). *Applied Animal Behaviour Science*. <https://doi.org/10.1016/j.applanim.2014.05.008>
- Mcbride, E.A., & Montgomery, D.J. (2018). Animal Welfare: A Contemporary Understanding Demands a Contemporary Approach to Behaviour and Training. *The International Journal of Research and Practice Animal Behaviour and Training Council*, 1(112), 2575–9078. Retrieved from <http://docs.lib.purdue.edu/paij%0Ahttp://docs.lib.purdue.edu/paij/vol1/iss1/4>
- Ng, Z.Y., Pierce, B.J., Otto, C.M., Buechner-Maxwell, V.A., Siracusa, C., & Werre, S.R. (2014). The effect of dog-human interaction on cortisol and behaviour in registered animal-assisted activity dogs. *Applied Animal Behaviour Science*, 159, 69–81. <https://doi.org/10.1016/j.applanim.2014.07.009>
- Nimer, J. & Lundahl, B. (2007). Animal-Assisted Therapy: A Meta-Analysis. *Anthrozoös*, 20(3), 225–238. <https://doi.org/10.2752/089279307X224773>
- Veissier, I. & Boissy, A. (2007). Stress and welfare: Two complementary concepts that are intrinsically related to the animal's point of view. *Physiology and Behaviour*, 92(3), 429–433. <https://doi.org/10.1016/j.physbeh.2006.11.008>
- Wohlfart, R. & Sandstedt, L. (2016): *Animal Assisted Activities with dogs, Guideline for basic requirements & knowledge*. Publishing House of Janusz Korczak Pedagogical University in Warsaw Erasmus Plus project.
- Zupan, M., Buskas, J., Altimiras, J. & Keeling, L.J. (2016). Assessing positive emotional states in dogs using heart rate and heart rate variability. *Physiology and Behaviour*, 155, 102–111. <https://doi.org/10.1016/j.physbeh.2015.11.027>

CHAPTER 4.

Important knowledge about dogs

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Choosing a dog for AAI

When talking about dogs in AAI, the most common question is “which dog to choose” and “how can I know this dog/breed would work nicely and how can I ensure its good welfare?” Let’s look at the behavioural development of dogs – the process during which “the dog becomes a dog”. In this chapter we will look at genetic disposition, the critical stages of development and sensitive periods– when they occur and what the consequences are of different experiences during those periods.

In the previous book, “Animal Assisted Activities with Dogs - Guideline for basic requirements & knowledge”, it was emphasised that selecting the right dog is of utmost importance (Wohlfarth & Sandstedt, 2016). The book also provided knowledge about personality, different breeds, which traits you would like the dog to have, and much more.

The IAHAIO White Paper declares that animals involved in AAI should have the proper disposition and training to be selected for AAI. And further that “Regular evaluations should be performed to ensure that the animals continue to show proper disposition.” (IAHAIO, 2018).

So how can we ensure this? We recommend performing a personality assessment, evaluated by an ethologist with a minimum of three years higher education in dog behaviour. Personality can be defined as “consistent individual differences in behaviour” (Fratkin et al., 2013), which means that behaviour is at least somewhat consistent across time and/or situations. So what influences behaviour? Nature or nurture? Of course, the answer is both. But we know that we have genetic predispositions for different behaviour, and as an example, researchers have now found genomic regions associated with fear in dogs (Sarviaho et al., 2019). This is likely just the beginning of findings in the field of genetic predispositions.

This also tells us that not every dog is suited for work in AAI. As Patricia McConnell emphasizes in the chapter “Understanding the other End of the Leash: What Therapists Need to Understand about Their Co-therapists” (McConnell & Fine, 2015), there is only one dog in a million that is really great as an AAI dog. It is important not to put dogs/animals in situations they are not comfortable in, so don’t force your dog to work with AAI if he is not suited for it. Love him for being a devoted pet dog, which is a very important attribute

as well. Some dogs that are not suitable for animal-assisted interventions are successful in other tasks such as obedience, agility, tracking and more.




Dogs that work in animal-assisted interventions need to feel safe, seek and desire contact with people, be able to alternate between rest and activity and must be well trained in different environments. Furthermore, they should be reliable, predictable, controllable, usable, and have the ability to create trust and confidence.

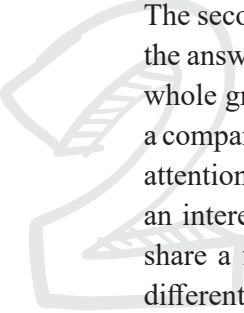
Dog behaviour

Many studies and observations that were supposed to explain the behaviour of the domestic dogs were based on the behaviour of wolves. The conclusions were therefore generalised and applied to both species. Now, researchers agree that the dog is a separate species, not a kind of tame wolf (e.g. Coppinger et al., 2009; Serpell, 2017). Domestication is a diametrically different process from taming because it affects genetics, appearance and behaviour - and these changes are inherited. The behaviour of a dog depends on genetics, experience and training (Haworth et al., 2008; Rosenström et al., 2018). The differences in the behaviour of dogs of different breeds were confirmed in studies (Scott & Fuller 1965; Svartberg 2006) and led to the hypothesis that **genetics has a significant impact on behaviour and that breeding selection can modify behaviour**. This hypothesis is confirmed not only by breed differences and predispositions but also at the molecular level - attempts to isolate genes responsible for given behaviours are underway. Unfortunately, we do not currently have enough data to draw valid conclusions. Researchers agree that the natural environment of a dog is an “ecological niche” created by humans (e.g. Herre & Röhrs, 1990; Serpell 1995; Miklosi, 2015). Not only is the dog a separate species, and therefore presents a different spectrum of behaviours, but it is also a captive animal/ living in a limited space, which does not correspond to the natural living conditions of the wolf. This therefore cannot be the basis for conclusions, and comparisons, even about wolfish behaviour.

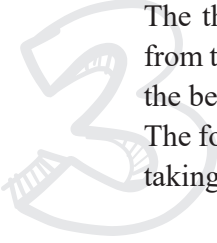
To answer the question “Why a dog behaves the way it behaves”, Adam Miklosi uses four questions, for which Nikolaas Tinbergen received the Nobel Prize in 1969. The first one is the question about the function, or how the behaviour affects the survival of the species (which function fulfils its survival). In the case of dogs, the behavioural analysis may be slightly disturbed because it



was people who decided on the selection of individuals to be propagated. Nevertheless, it was decided to reproduce some useful dogs, and those features - subjectively selected by breeders - were rewarded.




The second question is about the evolutionary justification of behaviour. To find the answer, we need many studies showing the similarities and differences in the whole group of “canines” (dogs, wolves, coyotes, jackals and dingo) as well as a comparison of the behaviour of different breeds within the species. Also, paying attention to the possibility of a comparative study of dogs and human seems like an interesting aspect - even though they do not have common ancestors, they share a familiar environment, and co-operate with each other many times on different levels; consequently, they present many similar behaviours.



The third question is a question about mechanisms that control behaviour - from the etiological point of view, these are the internal mechanisms that guide the behaviour of the animal.

The fourth question concerns the development of a given behaviour over time, taking into account the historical and individual context.

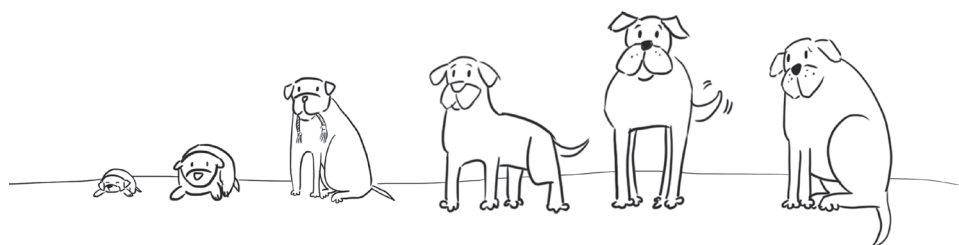


These four general questions and careful observations provide the basis for determining the behaviours typical of dogs. However, we must keep in mind that each dog exhibits some individual characteristics and modifications of habitual responses, resulting from interaction with the environment and acquired experiences, and genetic differences. To analyse dogs’ behaviour, we need to distinguish between temperament and personality. The temperament can be interpreted as inherited tendencies that appear in early “puppyhood” and are reflected throughout the dog’s lifetime. It is the basis for personality formation (Goldsmith, 1986).

Personality is an individual’s complex behavioural patterns that are stable across time and context. To learn more about what a dog’s personality is, we can use a standardised battery of tests, but some of the personality aspects are difficult to measure. The personality fully develops in adult dogs, and that’s why there are so many problems in predicting behaviours of adult dogs based on puppy tests. Researchers identify six main personality traits in dogs: fearfulness, sociability, responsiveness to training, aggression, boldness and

activity. See the chapter in this Handbook: Personality assessment for dogs in AAI for further information and please consult “Dog behaviour, evolution and cognition” by Ádám Miklósi. (2015).

Stages of a dog's development



The early development of a dog can be divided into four stages: the neonatal period, the transition period, the socialisation period and the juvenile period. From research and observation, we know that there is no actual timing for the periods; they are relative, depending on the individual. Developmental periods should be understood as guides and tips to understand the holistic process of a dog's development. Behavioural development is the process through which the genetic potential of the organism unfolds in a given environment (Miklosi, 2017). Serpell (2017) found that, in contrast to early beliefs, these periods and boundaries are not as rigid and some of the behaviours can also be modified or even reversed at later stages.

Unfortunately, there is not much research on dogs to show many correlations, but we can generalise, based on some rodent studies, that the stressful experiences of pregnant mothers display enhanced stress sensibility of offspring, tested later in life. (Champagne, 2007; Weinstock, 2008). The appearance of such changes depends on the timing of the maternal stress, its intensity and duration, gender of the offspring and is associated with structural changes in the hippocampus, frontal cortex, amygdala and nucleus accumbens. Wells and Hepper (2000) proved that puppies in a mother's womb could learn to recognise odours added to the mother's diet during the last weeks of pregnancy and they prefer it as “safety food” when they grow up.

The neonatal period

This period begins at puppies' birth and lasts (approximately) until the twelve-fourteenth day of life. Puppies are dependent on their mother and are helpless – their motor abilities are limited, and sight and hearing aren't fully developed. Notwithstanding, they are sensitive to tensions and odours, and their tactile sense receives many stimuli from the environment.

Puppies can learn simple associations, but the developing senses and mental abilities limit them. As we know from Fox (1971) and Zimen (1987) wolf cubs hand-reared from birth to six days of age are more friendly and reliable towards people than those hand-reared from 15 days or later. It is likely that the human smell is somehow imprinted and connected with positive emotions (while eating). In this period, there is a great variation of motor skills between dog breeds and wolf cubs. For example, Husky puppies move on legs on day 2 while the Labrador Retriever is delayed to day 15 (Feddersen-Petersen, 2001). This fact is very significant when conducting observation and puppy tests to choose the right puppy for future AAI work; we cannot skip breed differences and preferences. It also shows how difficult it is to set physical boundaries for dogs' development periods. According to Fox (1971) and Zimen (1987), it is also essential for a friendly human to provide care for the dog during this period of development to imprint human odours and make the socialisation process easier. However, as we see later on, for dogs the most crucial period for human interaction is the "socialisation period".

The transition period

This period starts with the opening of the eyes (13+/-3 days) and ends with the opening of the ears (days 18-21). There is a difference between breeds - not only are the final dates different, but also the length of this period is different between the breeds. For example, in Cocker Spaniels it is longer than one week; in terriers it lasts for only a few days, but it starts a few days later than in spaniels (Scott and Fuller, 1965). During this period, motor skills improve, which allows better co-ordination while walking, running and jumping even if it's still funnily and clumsily. Also, communication skills improve, we can observe tail wagging, biting games and interactions with siblings. Puppies are interested in solid food and start to defecate outside the nest (if they have the possibility).

The socialization period

This period starts in the fourth week and lasts until the twelfth week of a puppy's life (day 22 to 84). During the socialization period it is important that the puppy learns to communicate and build social attachments with littermates and their mother, that they learn how to be around other dogs and humans, and that they are exposed to and get used to the environments that they are going to live in as grown up dogs.

Research shows that puppies raised with only kittens (between 3-16 weeks of age) avoid contact with other puppies during the first meeting (Fox, 1969). The responsibility of socialising puppies and showing them the world should be taken by the breeder who should ensure as many different experiences as possible in a friendly and safe environment – for puppies and their mother.

Another significant result of the socialisation process is a non-conspecific social attachment. Socialization period is the time when dogs learn to communicate and trust other species, including humans. Dogs establish bonds with humans, even if the experience isn't frequent. Even a 20-minute socialisation session a week is enough for dogs to learn to socialise with humans (Fuller, 1967). The shortest reported time that is enough for "adequate socialisation" is as short as 5 minutes per puppy per week (Wofle, 1990). Unfortunately, no data is available showing the differences between "5 minutes socialisation" and every day, full-time care for the puppies. Nevertheless, it is good to familiarise a puppy not only with humans as a species but also with different ways of playing/working with people. If the puppy is familiar with playing with humans and has a habit of paying attention to humans, it will be much easier to train the young dog. The puppy needs to discover that it is joyful and fun to play and be around people (without the siblings and mother), as (in AAI) the adult dog is supposed to be focused and secure around people. If the puppy could gather all those experiences while being in a safe, familiar environment, it would be very beneficial. It is worth remembering that there are significant breed differences, mainly connected with fearful/avoidant responses (Feddersen-Petersen, 2001), which can cause an increase in stress and cortisol level.


During the socialisation process puppies also learn to cope with different places and surfaces; they can even form an attachment to particular places (Scott

& Fuller, 1965). To avoid uncertainty and avoidant responses, it can be an advantage to introduce the litter to various surfaces (grass, floor panels, stones, carpet and some unstable surface – for example, a small balance beam). The socialization process during this period is very dynamic also because of rapid brain development and new cognitive possibilities. It has been proved that puppies can learn to recognise objects they have seen on video. (Pluijmakers et al., 2010). Puppies recognise those objects and show less fearful/avoidant responses in the future (tested at 7-8 weeks). For us it is another significant piece of information – proper socialisation of the puppy doesn't have to mean that the puppy needs to “touch” or sniff everything itself. Observation is also an excellent way of learning and understanding the environment. For AAI dogs it is also essential to observe the world calmly and safely, so the handler (breeder) should prepare observation thoughtfully and be sure to guarantee that the dog doesn't chase the object (if not needed) and the object/other animals doesn't frighten the pup. In many situations observation is a much better way to socialise the puppy because it is safer and more accessible for a young dog to handle. It also prevents overstimulation, which is very often a side effect of poorly carried out socialisation.

In the literature, we can find a distinction between primary and secondary socialisation periods. It is based on differences in the mechanisms involved (Scott and Fuller, 1965, Freedman 1961). Primary socialisation takes place in the “imprinting-like” phase; it's not only dependent on external incentives, but the main learning motivation is emotional arousal.

There is no agreement when precisely this phase takes place; some researchers argue it is 3-5 weeks (Lindsay, 2001), or 3-8/10 weeks (natural weaning) (Mech, 1970; Packard, 2003). This is a rapid learning phase, when the dog learns to “be a dog” – to communicate, to behave and to build a social bond with conspecific. In this period puppies go through significant changes both physically and socially and develop their ability to communicate.

The secondary socialisation takes time when the cubs start to join the pack (in the wild) or when they start to interact with human (family dogs) actively. It is connected with various forms of learning. The puppy is learning about the environment and other species (e.g. humans). Dogs have the unusual ability to create in the brain “social areas” or “mental representation” (Bradshaw,



2011) enabling them to have good contact with several species. These areas are shaped in the critical period (3-12 weeks) – if the puppy meets at this time only other dogs, it will not be able to get along well with people. But if they have good relationship at the time with people, children (probably for dogs, children are a “separate category” of species, due to different smell and unusual behaviour), cats and other animals, for each of these species they will create a separate social space in the brain allowing them to make good interactions. What is significant is that they do not lose their ability to be dogs; they also have no identity problems. This ability to create many social spaces is unique in the animal world. For comparison, if wolves in the sensitive period get to know people, they will have a friendly attitude towards them - but only to those few people whom they have met during the time of socialisation. Dogs form the “man” category and all beings similar to those encountered in the sensitive period are also treated as belonging to a familiar species. Despite the high ability to co-operate with other species, in particular with humans, dogs that are deprived of contact with people in a critical period will never establish a good relationship with them.

The juvenile period

It runs from 12 weeks and lasts until the end of the second year (one year for some breeds) (Miklósi 2015). Before some researchers refer that the period lasts to six months (Scott and Fuller, 1965), and you can find that information in some literature. The end of the period corresponds with the onset of sexual development in wolves (Serpell, 2017). In dogs the onset of sexual maturity is independent of behavioural maturation – many breeds do not display fully adult-like behaviour until two years of age. (Miklósi, 2015) There are also differences between breeds – some breeds reach sexual maturity at 6-7 months, while others (giant breeds) do not mature until 18-24 months.

Experiences gained in the juvenile period may be very helpful for the future work, and they could have a long-time effect on behaviour (Fox, 1971; Dehasse, 1994;). In this time, puppies start to develop attachment bond with their handler, manifesting with following, staying close, and running back to the handler in stressful situations. It is also recommended to ensure some socialisation with other dogs of different ages and different breeds. In this period communication skills are developing, and the dog is getting more confident while communicating with others. Unfortunately, in this period a lot

of dogs spend many hours home alone, while their humans are working. To avoid regress in socialisation, and to make our dog more confident in social situations, we need to ensure social stimuli in a controlled and pleasant environment. It is not recommended to let the dog run freely always when he meets other dogs – this may cause distress and unwanted behaviours (hyperactivity, problems with relaxing, barking, jumping, pulling on a leash and loss of trust to the handler). Much better way to ensure social contacts with conspecific is to choose few well-known, stable dogs and let the juvenile have friends with them.

Timing for re-homing a puppy

Some research has been conducted regarding when the best time is to rehome a puppy. The socialization period, especially weeks 6-8, is crucial for the development of the dog-human bond (Scott & Fuller, 1965), but at the same time, when we consider other developing abilities it is maybe not the best time for re-homing. In conducting research with German Shepherd puppies, Slabbert & Rasa (1993) found that separation from mothers and familiar environments resulted in the loss of appetite and weight and increased distress in pups, compared to pups which stayed with their mothers until 12 weeks of age. Pfaffenberg and colleagues (1976), conducting research with guide dogs, reported that the dogs are more likely to do well in training if they are rehomed just after weaning. It is the best time for their welfare and developmental needs, and on the other hand, they are happy and “mature” enough to face new environment and challenges.

Our recommendation is that you should not get a puppy that is younger than 8 weeks old, because it is important that the puppy stays with its mother and siblings and learns how to behave like a dog and learns bite inhibition. If you want the puppy to stay with the breeder for more than 8 weeks, it is important that the breeder has the opportunity to spend time with the puppy and socialize it.

A lot of beginner handlers or handlers who would like their dog to work in AAI (or any other dog activity) want to prepare the puppy as best as possible. So, they make a very intense socialisation plan, containing a lot of activities, challenges and attractions. For many puppies, it is too much, and they become over stimulated; distress may increase, and the dog may present some problem

behaviours, for example, barking, chewing objects (including paws and hands), being active all the time and problems with relaxing.

Unfortunately, there is no ideal way of socialising a puppy – it depends on the breed, sex, self-confidence of the puppy and many more other factors that we need to consider. The clue is to observe the puppy and to understand its communication. **Our primary goal during the socialisation process should not be quantity, but rather the quality of a dog's experiences.**



Adulthood – end of behavioural development

This period starts between approximately one and three years of age, but for most dogs, it does not involve significant changes in life. It is the opposite with wolves – they leave their native pack and attempt to live on their own, with the new family pack. For dogs, it is the most stable period in life, which makes this time perfect for work in AAI. We can also clearly see the personality of the dog, test it, and check its abilities to work with people.

A dog's socialisation to AAI purpose

Socialization is the process of learning about the environment (social and physical) and building the dog's self-confidence. It is needed to teach the puppy to feel safe in the environment, to bond with humans, dogs and eventually other species. During socialisation, dogs need to become familiar with vehicles, objects, places and any possible environmental elements that they will face in adult life. You can read more about this in several chapters in Animal Assisted Activities with Dogs Guideline for basic requirements & knowledge' (Wohlfart & Sandstedt, 2016).

Socialization at the breeder

Socialization, to be most effective, needs to start long before a dog enters a new home. For this reason, the selection of the breeder is a key and a very responsible decision, which may have lifetime consequences. The breeder is the first person responsible for the puppy's socialisation.

Some breeders use pre set up programmes for the puppy socialization. One of the programmes is called "Early Neurological Stimulation programme".

This programme was created by the U.S. Army to improve the functioning of their working dogs. You can read more here,; (<https://breedingbetterdogs.com/article/early-neurological-stimulation>)

What is interesting about the Early Neurological Stimulation Programme is that the super-effect is noticeable only when we compare the stimulated puppies with the relatively deprived ones (Miklosi, 2015). We can assume that it is not the specific stimulation programme but the caring and quality interactions with the breeder that makes the difference (also Gazzano et al. 2008).

Socialization in the new home

We would like to emphasize that before you start socialization and habituating the puppy to other people and the environment around, it is important that the puppy feels safe with you and that it trusts you. Use the first days with the puppy to get to know it and let the puppy get to know you. Try to find out what the character of your puppy is, so that you can facilitate the socialisation and the habituation in the best way.

There are some standard protocols on what you are supposed to do with your puppy after you have brought it home. One of them is “The Puppy’s Rule of 12” by Margaret Hughes - if you want to learn more, follow this link:



It is important to bear in mind that every puppy is an individual; you must read your puppy well so that you do not overload it when you try to socialize and habituate. If you are overloading the puppy with too much pressure, you are making the dog



more sensitized and insecure, exactly the opposite of what you are aiming for. Puppies need a lot of time to sleep and play, so you also have to take that into account when you are working with your puppy.

During the socialisation process, the quality of stimuli is as important as the quantity.

Think about it

For example, if we need to socialise a puppy with children and we take it to the playground where children are running and screaming, the puppy may behave in different ways.

1. The puppy may be scared and try to run away from children.
2. The puppy may want to chase children and bite their legs.
3. The puppy may be scared or insecure and bark at children.
4. The puppy may behave calmly and securely.

Only the fourth behaviour guarantees proper socialisation. In all other cases, the dog will remember that children are something strange, maybe dangerous and that it should be afraid or aggressive towards them. To avoid such connections, make sure that the stimuli that the dog is getting familiar with are not too big and intense. The puppy should be able to handle it with the support of the handler. When socialising with children in a playground, we advise you to go nearby and sit calmly on the grass, rather than to go in the middle of the playground and allow the dog to interact with everybody. It's also a good idea to divide such intense experiences into a few smaller steps – so on the first day approach the playground area, next day stay outside the fence, and if the dog is calm and secure, you can enter the playground (if allowed) on the third day.

To ensure that the puppy feels secure and has a positive feeling, you may use a nice calming position with a massage. Sit on the ground with the puppy between your legs, hold the collar and pet the dog slowly (really slowly) with quite a steady pressure on the chest. You can put some treats in front of the puppy and let the dog focus on them. Allow the pup to eat one of the treats by giving it directly in its mouth when you feel that the dog is calm and relaxed.

This kind of massage is a pleasant and calming experience, but dogs still need time to get used to it. You can read more about this in Animal Assisted Activity for dogs - Guidelines for basic requirements & knowledge (Wolfhart & Sandstedt, 2016).

For AAI purposes it is essential that the dog stays calm and relaxed in many situations. To achieve that, during socialisation we should focus on the dog's emotions. Remember to teach your dog self-control (Look in the chapter "Exercises for AAI") and use it as a tool in different situations. It will help your dog to cope with the environment and give it a nice clue how to behave in general: "If you don't know what to do, just stay close to your human and wait calmly".

If your dog is good at visiting new places and being calm and relaxed there, you can add some more training to teach it to work with distractions. So continue visiting sites, start with sitting calmly in a new situation and then add some training, like basic obedience or playing with your dog.

To make sure that the dog is open to strangers and able to focus on working with them, you can start by inviting people to your home whom the dog does not know and allow the dog to interact with them. It is best to wait until the dog is calm and relaxed before it is allowed to interact with people.

Socialization with facilities and workspace

It is a good idea to show the dog different places for future work. Socialisation visits should be quite short and fun for the dog. So, enter the facility, stay for a while in a safe space (without lots of people wanting to pet your dog) and after your dog is calm and focused, enter some rooms or corridors. The dog will become familiar with specific smells (especially in medical facilities or care facilities that have a lot of intense, atypical smells), different surfaces, and strange objects (for example, "monsters" like rehabilitation balls, cleaning equipment trolleys or respirators).

Ideal socialisation is when your dog can cope well with these different situations and that it is comfortable when you leave the situation. For example, on the first visit, you approach the facility area and maybe go inside for a while; on

the second visit go inside and stay there a couple of minutes; on the third visit go to the rooms and play/exercise, and then, if the dog is ready, it may say hello to a few nice and friendly people. Unfortunately, it's not very common that we have such an opportunity to work with the facility. Very often, during the visit with a puppy or a youngster, everybody (personnel and inhabitants) wants to say hello, pet the dog or give it a hug. That can be too much, especially for the not very self-confident dog, and the visit may have the opposite socialisation effect.

There is no magic recipe for socialisation – it is a process based on interactions between the dog, the handler and the surroundings. If the handler wants it to be as beneficial as possible, he/she needs to understand the dog and respond to its needs.



Further reading:

“The dog. A Natural History” Ádám Miklósi (2018)

“Attachment to pets” Henri Julius, Andrea Beetz, Kurt Kotrschal, Dennis Turner, Kerstin Uvnäs Moberg 2012

References

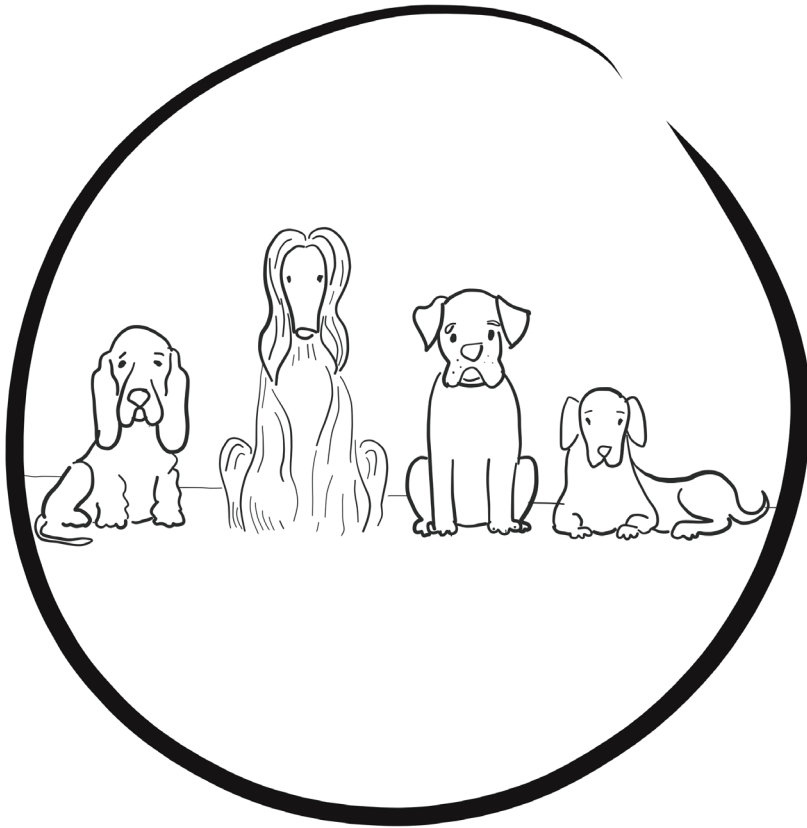
- Bradshaw, J. (2011) Dog sense. How the new science of dog behaviour can make you a better friend to your pet Tantor Media
- Champagne F. A., Meaney M. J. Transgenerational effects of social environment on variations in maternal care and behavioral response to novelty. *Behavioral Neuroscience*. 2007
- Champagne, F.A. (2008) Epigenic mechanisms and the transgenerational effects of maternal care. *Frontiers in Neuroendocrinology*, 29: 386-97
- Coppinger, R., Spector, L., Miller, L., (2009) What if anything is a wolf? In *The World of Wolves: New Perspectives on Ecology, Behaviour and Management*. University of Calgary Press, Calgary, Canada, 412 pp
- Dehasse, J. (1994) Sensory, emotional and social development of the young dog. *Bulletin for Veterinary Clinical Ethology*, 2: 6-29
- Feddersen-Petersen, D. (2001). «Hunde und Ihre Menschen». Kosmos Verlag, Stuttgart
- Fox, M. W. (1969) behaviour effects of rearing dogs with cats during the “critical period of socialization”. *Behavior*, 35:273-80.
- Fox, M. W. (1971) behaviour of wolves, dogs and related canids. New Yorker: Garland STPM Press.
- Fratkin, J. L., Sinn, D. L., Patall, E. A., & Gosling, S. D. (2013). Personality consistency in dogs: a meta-analysis. *PloS ONE*, 8(1), e54907-e54907. Doi:10.1371/journal.pone.0054907
- Freedman, D. G., King, J. A. & Elliot, O. (1961). Critical periods in the social development of dogs. *Science*, 133: 1016-17
- Fuller, J. L. (1967). Experimental deprivation and later behaviour. *Science*, 158: 1645-52
- Gazzano, A., Martiti, C., Notari, L. et al. Effects of early gentling and early environment on emotional development of puppies. *Applied Animal Behavior Science* 110, 294-304
- Goldsmith R.E., (1986) Personality and Adaptive-Innovative Problem Solving, *Journal of social behaviour and personality*, Florida State University Tallahassee
- Haworth, C. M., Dale, P., & Plomin, R. (2008). A Twin Study into the Genetic and Environmental Influences on Academic Performance in Science in nine-year-old Boys and Girls. *International journal of science education*, 30(8), 1003.
- Herre W., Röhrs M. (1990) *Haustiere- zoologisch gesehen*. Gustav Fisher Verlag, Stuttgart, New York 1990
- Lindsay, S.R. (2001). *Handbook of Applied Dog Behavior and Training*. Vol. 2: Etiology and Assessment of Behavior Problems. Ames, IA: Iowa State University Press
- McConnell, P. & Fine, A.H. (2015). Chapter 9 – Understanding the Other End of the Leash: What Therapists Need to Understand about Their Co-therapists *Handbook on Animal-Assisted Therapy (Fourth Edition)* (pp. 103-113). San Diego: Academic Press.
- Mech, L.D. (1970) *The wolf: the ecology and behaviour of an endangered species*. Natural History Press, New York.
- Miklosi, A. *Dog Behaviour, evolution and cognition*, second edition. Oxford University Press
- Miklósi, Á (2015) “Dog behaviour, evolution and cognition. Second edition”. Oxford University Press
- Packard, J.M. (2003). Wolf behaviour: Reproductive, social and intelligent. In D. Mech and L. Boitani, eds. *Wolves: behaviour, ecology and conservation*, pp. 35-65. University of Chicago Press, Chicago

- Pfaffenberg, C.J., Scott, J.P., Fuller, J.L., Ginsburg, B.E. & Biefelt, S.W. (1976) Guide dogs for the blind: their selection, development and training. Elsevier, Amsterdam.
- Pluijmakers, J.J.T.M. Appleby, D.L. & Bradshaw, J.W.S. (2010). Exposure to video images between 3 and 5 weeks of age decreases neophobia in domestic dogs. *Applied Animal Behaviour Science*, 126: 51-58.
- Rosenström, T., Gjerde, L., Krueger, R., Aggen, S., Czajkowski, N., Gillespie, N., Kendler, K.S., Reichborn-Kjennerud, T., Torvik, F.A. & Ystrom, E. Joint factorial structure of psychopathology and personality. *Psychological Medicine*, 1-10. Doi:10.1017/S0033291718002982
- Sarviaho, R., Hakosalo, O., Tiira, K., Sulkama, S., Salmela, E., Hytönen, M.K., Sillanpää, M.J. & Lohi, H. (2019). Two novel genomic regions associated with fearfulness in dogs overlap human neuropsychiatric loci. *Translational psychiatry*, 9(1), 18-18. Doi:10.1038/s41398-018-0361-x
- Scott, J.P. & Fuller, J.L. (1965). Genetics and the social behaviour of the dog. University of Chicago Press, Chicago
- Serpell J. (1995) *The Domestic Dog: Its Evolution, Behaviour and Interactions with People*, ambridge University Press,
- Serpell J., et al. (2017). *The domestic dog. Its evolution, behaviour and interactions with people*. Cambridge University Press.
- Slabbert, J.M. & Rasa, O.A. (1993). The effect of early separation from the mother on pups in bonding to humans and pup health. — *J. S. Afr. Vet. Ass.* 64: 4-8.
- Svartberg, K. (2006) Breed-typical behaviour in dogs—Historical remnants or recent constructs? *Applied Animal Behaviour Science* 96(3):293-313
- Weinstock, M. (2008) Long-term behavioural consequences of prenatal stress. *Neuroscience and biobehavioral Reviews*, 32: 1073-1086
- Wells, D.L. & Hepper, P.G. (2000). Prevalence of behaviour problems reported by owners of dogs purchased from an animal rescue shelter. *Applied Animal Behaviour Science* 69(1), 55-65.
- Wohlfarth, R., & Sandstedt, L. (2016). *Animal Assisted Activities with Dogs – Guideline for basic requirements & knowledge*. Publishing House of Janusz Korczak Pedagogical University in Warsaw Erasmus Plus project.
- Wolfe, T. L. (1990) Policy, program and people: the tree PS to well-being. In *Canine Research Environment*. Eds. J. A. Mench & L. Krulish. Brthasda, MD: Scientists Center for Animal Welfare, pp. 41-7.
- Zimen, E. (1987). Ontogeny of approach and flight behaviour towards humans in wolves, poodles and wolf-poodle hybrids. In *Man and Wolf*, ed. H. Frank. Dordrecht, The Netherlands: Dr W. Junk Publishers, pp. 275-92.

CHAPTER 5.

Different dog breeds in AAI

Prepared by Christine Olsen



Working in animal-assisted interventions is quite challenging for a dog. Being close to clients/patients or pupils of different ages, shapes and situations is hard and not all dogs are suitable for these challenges.

There are about 400 breeds of dogs in the world today (Parker et al. 2017) and none of the breeds is born a ‘therapy or school dogs’; their suitability depends on each dog’s personality.

Among adult dogs you can find dogs not suitable for AAI in every breed, and you can find some individuals that are just perfect for AAI among breeds that are not typical in this kind of work (Nawarecka-Piątek et al. 2016). Some breeds look like they have, as puppies, the perfect character for AAI, but as they grow up to be adults their personal zones expand and they are not suited for AAI.

You can read more about personality in dogs in this book in the chapter Choosing a dog for AAI.

Research shows us that there are quite large differences in dog breeds. The Swedish Kennel Club has documented breed differences in sociability, fearfulness and aggressiveness (Svartberg & Forkman, 2002, Svartberg et al. 2005). Parker et al (2004) looked at 85 breeds. They found that breeds that had relatively high similarity in genetic structure had many of the same behaviour traits. The group of breeds referred to as wolf-like often had low affection demand and they tended to score high on aggression towards family members, aggression towards other dogs, snapping and territorial defence. The herding group was significantly different. There are also differences in breeds due to severity of aggression towards familiar and unfamiliar dogs and people (Duffy et al, 2008).

Serpell & Hsu (2005) found that breeds that are bred for fieldwork tend to score higher on “trainability” than show-bred dog breeds. Dogs that are bred to work together with humans (like herding dogs and gundogs that work a lot with visual contact with their human partner) were found to be better at following human cues than more “independent workers” that work without human visual contact (like hounds, sled dogs and guarding dogs) (McKinley and Sambrook 2000; Gácsi et al. 2009b; Wobber et al. 2009).

Regarding dog breeds, every human has their own preferences on what type of breed they prefer. All breeds have their pros and cons, and no breed is generally better than another. It depends on what the purpose is of having the dog. If your goal with the dog is to work with animal-assisted interventions, it is advisable to choose from breeds that are bred to work together with people, that can play with people and learn easily, and are psychologically resilient so that they can cope with unpredictable movements, high noises and confusions (VanFleet & Faa-Thompson, 2017). Dogs bred to guard homes and frighten strangers or to fight dogs/animals are usually not appropriate for work in AAI (Nawarecka-Piątek et al. 2016).

We also have to take into consideration what kind of interventions we want the dog to participate in. Do we want the dog to be active in the intervention or do we just need a dog that can relax on a couch or on a patient's lap? Do we want a dog that can retrieve, that will co-operate with the patients and the pupils or is it just important that the dog is present in the room? If the goal of the AAI is to enrich the environment, to create greater acceptance, to make clients or pupils feel calmer and safer in situations where they experience stress, or just to feel the comfort and happiness by being together with a warm and friendly dog, you can have a breed with quite a low energy level. If, on the other hand, you want to work with self-confidence and the feeling of successful achievements, motivate clients or pupils to work with challenging situations, to or enhance feelings of fun and joy, it will be an advantage to have a dog with a higher energy level. At the same time, it is important that the dog is not stressed and can relax together with the client/patient/pupil and be passive when nothing is happening. If we are looking for that kind of dog, we have to look for breeds that are bred to co-operate closely with people and at the same time breeds that are able to be around people in everyday life, in a relaxed and nice manner.



The facilities we work in are often pretty quiet, and a dog barking sharply might create a lot of distress amongst the people living and working there. Many of the clients and the pupils that we work with are also quite sensitive to sound. We want therapy and school dogs to be quiet and it will make our job easier if we look for a breed that does not make too much noise.

When we have decided what kind of breed we want, we also have to decide what kind of personality we want the dog to have. There are also differences regarding mentality/personality within breeds. Svartberg, Tapper & Temrin (2005) reported within-breed variation differences in personality. Selection towards use in dog shows correlates positively with social and non- social fearfulness, and negatively with playfulness, curiosity and aggressiveness, whereas selection towards use in working dog trials is positively correlated with playfulness and aggressiveness.



Then what about mixed-breed dogs? It can be hard to predict the future behaviour of mixed-breed dogs. An English Setter will not only differ from a German Shepherd because it points at the birds, but it differs a lot regarding other traits as well; it will probably not guard the house in the same manner as the German Shepherd and it will be more active in everyday life. When it comes to pure bred puppies, we can to some extent predict their personality when they grow up; with mixed-breed puppies it will be almost impossible to say something about their personality as grown-ups. Turcsán et al. (2017) reported that mixed breed dogs are more anxious and more stressed than pure bred dogs. The mixed-breed dogs were also less sociable toward other dogs.

Research also shows differences between genders. Males dogs are often found to be more aggressive to family members, and more aggressive and showing more territorial defence regarding other dogs (Hart & Hart, 2017). Male dogs also score higher on watchdog barking, activity level or snapping. Female dogs are more likely to be higher in trainability, easier to house train and they seek more affection (Hart & Hart, 2017). In many countries in Europe and the rest of the world it is common to neuter dogs, both males and females. It is no problem to work in AAI with intact dogs. There are dog diapers that can be bought for females in heat/season, and the diaper is often a source of interesting and funny conversations. Some, but few bitches, get very affected mentally when they are in heat and often only for a few days. Some are very affected by pseudocyesis after their season, and if that is the case, the dog should have some days off work. We do not recommend neutering dogs for work in AAI. In many countries, for example Norway, there is a law against neutering dogs if the dog doesn't have a medical condition that justifies the procedure.

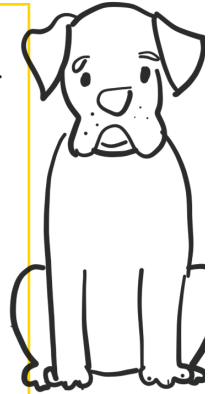


You should also reflect upon the size of the dog that you are going to work with. Very small dogs can easily get hurt by children and unpredictable clients (Nawarecka-Piątek et al. 2016). There have been situations where small dogs have been squeezed by clients and more than two people have had to help to release the dog.



The advantages with small dogs are that they are cute and very few people are afraid of them. Small dogs can also arouse empathy in patients and people tend to want to take care of and nurture them. They are also easy to take along with you in public places - you can just carry them. For example, if you are going into an institution and it is raining, you can just put the dog inside your jacket and carry it inside - the dog will be dry and clean when you enter the workplace. With a larger dog this would not be possible. It can also be an advantage to have a small dog if the patient is bedridden; it can be easily placed in the bed next to the patient. However, some clients do not regard small dogs as dogs; they often want a “real” dog, a larger dog.

Giant dogs are often very heavy, and they can take up a lot of space. In many institutions there is limited space, so large dogs can be a challenge to bring in to some facilities. Often these large breeds are not bred to work with people, and they often have their origin as guard dogs for livestock and people. It can be difficult to teach the dog different tasks that they can do together with clients. Because of their size some people can be afraid of them, and some of them drool excessively. Even if you use towels and blankets to minimize the nuisance, some people find it distasteful and it can create unnecessary reservations for people participating in the intervention (Nawarecka-Piątek et al. 2016). The advantage with these giant dogs is that they can make people feel special and give them more self-confidence. It can also be great to feel the sensation of being close to such a big bear.



Breeds with a lot of fur or long fur are often very appealing to clients and pupils. To touch the soft fur and bury a hand or face in it, can be relaxing and very satisfying. These kinds of dogs need a lot of grooming and washing if

they are going to be included in AAI. They are also quite affected by heat, and have problems working if it gets too hot. In many of the institutions the heat can be quite hard for them, and their working abilities are reduced.

How clients or pupils perceive the dog is often based on past experiences with the breed or similar looking dogs. Cultural and social norms will also make an impact on how people react to different looks or breeds of dogs. Clients and pupils often react differently to a Rottweiler and a Golden Retriever, or a German Shepherd Dog and a Poodle. In some cases, it can be an advantage to work with a German Shepherd Dog, for example, but at other times it will be a disadvantage to have the same breed. If you are working with young boys, at the age of sixteen, and the goal of your therapy is to enhance self-confidence and the feeling of handling life better, a German Shepard Dog or a Rottweiler will probably be perfect. But, on the other hand, if you are working to enhance caring and empathy, a smaller dog, like a Chihuahua, would probably be better.

Allergy-free dogs?

There is no such thing as an allergy-free breed. Vredegor et al. (2012) concluded that: “There is no evidence for the classification of certain dog breeds as being “hypoallergenic.” In this study they focused on the level of *Can f 1*, the major dog allergen, and they found that the variations between breeds are small compared with the variation within breeds.



The allergic reaction is due to the proteins in the pet’s dandruff, saliva, hair or urine. Proteins are small particles that mix with dust in the air and cause allergic reactions when they are inhaled or come into contact with the skin. When the animal licks, the saliva allergens can attach to the fur and then to furniture, clothing and textiles.

Allergy is a very complex thing; some people can have allergic reactions to one dog in one breed, but not to another dog in the same breed.

The only thing we can say for sure is that it will help to give the dog a bath. Hodson et al (1999) found that washing a dog twice a week reduces a dog’s allergen levels.

Stray dogs or shelter dogs

In general, we do not recommend including shelter dogs and/or stray dogs in animal-assisted interventions. In the first book *Animal Assisted Activities with Dogs - Guideline for basic requirements & knowledge* (Wohlfarth & Sandstedt, 2016) we wrote about providing a good foundation for our four-legged colleague - how to select the breeder, to socialize the puppy and how to habituate it to life. It is important that the dogs we bring with us in AAI are emotionally solid (see chapter: Choosing a dog for AAI). Wells and Hepper (2000) and Modelli et al. (2004) stated that it is not uncommon that dogs acquired from shelters have behaviour problems; some have such severe problems that the dogs are returned to the shelters. One of our goals in animal-assisted interventions should be to bring growth and well-being to all parties involved. We know that most stray dogs and shelter dogs have experienced big traumas; they really deserve to find safety and love in one family or with one person. We know that being with clients and/or pupils is tough for most dogs; dogs with traumas might not be able to deal with the expectations and pressure in AAI.

After you have read this chapter and considered the pros and cons of the different dog breeds, it is still important that you choose a breed that suits your own personality and preferences. Remember that you are going to spend a lot of time with your dog, both at home and at work. It is important for good practice in AAI that you and the dog have a great relationship, and this will only develop if the dog suits your personality as well.

References

- Duffy, D. L., Hsu, Y. & Serpel, J.A. (2008). Breed differences in canine aggression. *Applied Animal Behaviour Science*, 114: 441-60.
- Gácsi, M., McGreevy, P., Kara, E & Miklósi, Á (2009b) Effects of selection for cooperation and attention in dogs. *Behav Brain Funct* 5:31 . doi: 10.1186/1744-9081-5-31
- Fratkin, J.L., Sinn, D.L., Patall, E.A. & Gosling, S.D. (2013) Personality Consistency in Dogs: A Meta-Analysis. *PLOS ONE* 8(1): e54907. <https://doi.org/10.1371/journal.pone.0054907>
- Hart, L. & Hart, L. A. (2017). Breed and gender differences in dog behaviour. In *The Domestic dog: It's evolution, behaviour and Interaction with people*, (ed. J. A. Serpel), Cambridge University Press, Cambridge, United Kingdom. pp. 118-131.

- Hodson, T., Custocic, A., Simpson, A., Chapman, M., Woodcock, A. & Green, R. (1999). Washing the dog reduces dog allergen levels, but the dog needs to be washed twice a week. *J Allergy Clin Immunol* 103 (4): 581-585.
- McKinley, J., Sambrook, T.D. (2000). Use of human-given cues by domestic dogs (*Canis familiaris*) and horses (*Equus caballus*). *Anim Cogn* 3:13–22 . doi: 10.1007/s100710050046
- Modelli, F., Previde, E.P., Verga, M. & Valsecchi, P. (2004). The Bond That Never Developed: Adoption and Relinquishment of Dogs in a Rescue Shelter. *Journal of Applied Animal Welfare Science* 7(4), 253-66. DOI: 10.1207/s15327604jaws0704_3
- Nawarecka-Piątek, M., Kędziorek, M. & Kędziorek, K. (2016). How to choose a dog for AAA. In *Animal Assisted Activities with Dogs - Guideline for basic requirements & knowledge*, (eds. Wohlfarth, R. & Sandstedt, L.). Publishing House of Janusz Korczak Pedagogical University in Warsaw. pp. 185.
- Parker, H., Dreger, D.L., Rimbault, M., Davis, B.W., Mullen, A.B., Carpintero-Ramirez, G. & Ostrander, E.A. (2017). Genomic Analyses Reveal the Influence of Geographic Origin, Migration, and Hybridization on Modern Dog Breed Development. *Cell Rep*, 19. 697-798. doi: 10.1016/j.celrep.2017.03.079
- Parker H.G., Kim, L.V., Sutter N.B, Carlson, S., Lorentzen, T.D, Malek, T.B, Johnson, G.S., DeFrance, H.B., Ostrander, E.A. & Kruglyak, L. (2004). Genetic structure of the purebred domestic dog. *Science*. 304 (5674): 1160–1164. DOI: 10.1126/science.1097406
- Serpel, J.A. & Hsu, Y. (2005). Effects of breed, sex, and neuter status on trainability in dogs. *Anthrozoos*, 18:196-2017.
- Svartberg, K. & Forkman, B. (2002). Personality traits in the domestic dog (*Canis familiaris*). *Applied Animal Behaviour Science*, 79: 133-55.
- Svartberg, K., Tapper, I. & Temrin, H. (2005). Consistency of personality traits in dogs. *Animal Behaviour*, 69: 283-91.
- Svartberg, K.(2005). Breed-typical behaviour in dogs—Historical remnants or recent constructs? *Applied Animal Behaviour Science* 96 (2006), 293–313.
- Turcsàn, B., Miklösi, A. & Kubinyi, E. (2017). Owner perceived differences between mixed-breed and purebred dogs. PLOS ONE. <https://doi.org/10.1371/journal.pone.0172720>
- VanFleet, Risë & Faa-Thompson, T. (2017). *Animal Assisted Play Therapy*. Professional Resource Press. Sarasota, Florida, USA., pp.377.
- Vredegoor, D.W., Willemse, T., Chapman, M.D., Heederik, D.J. & Krop, E.J. (2012). Can f 1 levels in hair and homes of different dog breeds: lack of evidence to describe any dog breed as hypoallergenic. *J Allergy Clin Immunol* 130 (4): 904-909. doi: 10.1016/j.jaci.2012.05.013
- Wells, D. L. & Hepper, P. G. (2000). Prevalence of behaviour problems reported by owners of dogs purchased from an animal rescue shelter. *Applied Animal Behaviour Science* 69(1), 55-65.
- Wobber, C., Hare, B., Koler-Matznick, J., Wrangham, R. J. & Tomasello, M. (2009) Breed Differences in Domestic Dogs' (*Canis familiaris*) Comprehension of Human Communicative Signals. *Interact Stud* 10:206–224. doi: 10.1075/is.10.2.06wob
- Wohlfarth, R., & Sandstedt, L. (2016). *Animal Assisted Activities with Dogs – Guideline for basic requirements & knowledge*. Publishing House of Janusz Korczak Pedagogical University in Warsaw Erasmus Plus project.

CHAPTER 6.

Interpreting and understanding dogs

Prepared by Magdalena Nawarecka-Piątek



Communication

When talking about dog's communication we must be aware that dogs are highly social animals, so they have a vast and diverse range of communication skills. They can also read and answer both dog and human signals (Lakatos et al., 2009).

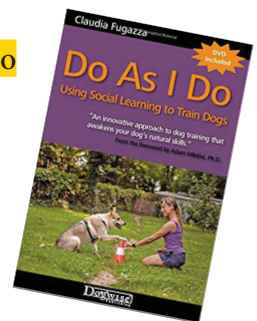
For a better understanding of the mechanisms that are responsible for communication and the emotions of dogs, we need to understand the impact of domestication. For at least 5400-16300 years (Pang et al., 2009) or even 32000 (Miklosi, 2018), dogs have been living and co-operating with humans. During domestication, humans rewarded skills that made communication and understanding easier, so that the dogs were better partners in many different situations.

Focusing on others is needed not only for communication but is also a must-have skill for social learning and performing co-operative and competitive behaviours. We needed our dogs to pay more attention to us, than to environment and conspecific – and that was probably one of the goals of the breeding selection.

Fascinating research by Range et al. (2009) has shown that dogs pay more attention to a demonstrator than to another dog! Dogs are able to read both human body language and emotions very well. For example, if the dog is scared of a person in a wheelchair making noises, we can show our interest to this person, talk to him/her or stay close to reassure the dog that it is safe and what behaviour is desirable. If our body is “stranger-oriented” and our focus is on the person, the dog will probably also approach the person and feel more secure in this situation. During this communication, dogs use not only social learning, but they also rely on our body language, tone of voice and proximity. They can even use the gaze as a cue – if the gaze was explicitly addressed

To learn more about social learning read: *Do As I Do: Using Social Learning to Train Dogs* by Claudia Furgazza

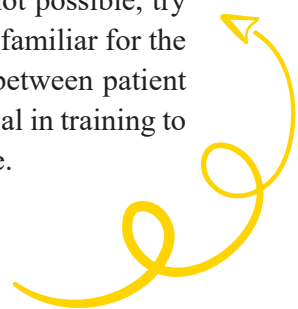
Look also on Family Dog Project website in Publications – search for “social learning” to be consistent with style, perhaps add this as ‘Further reading’ at end of this section?



to them (Met et al., 2014; Wallis et al. 2015). We can use gazes not only as a command/clues for dogs, but also to show the direction or person that we want the dog to interact with. It is useful to take advantage of this knowledge during the interventions and during the training. For some dogs, it is easier to understand the whole body posture and direction as a cue, but others are perfectly fine with gazes and small gestures.



Dogs react better to the command or verbal cues if the owner/handler body orientation suggests that the command was intended for them (Gácsi et al. 2004). If the owner uses command but is facing another person (experimenter), dogs do not react or perform the behaviour, even if they know the word (Virányi et al., 2004). This is significant for two reasons: during interventions, it is much easier for the dog if the handler is “dog-oriented” with his body, especially in some tough situations. Secondly, it is also essential to train the dog to react for the clues no matter what the position of the handler is. Add to your training simple, well-known (to the dog) commands like “sit” or “down” and try to give the command while in different body positions – sitting on a chair, lying on the couch, standing with your back to the dog. That will make your communication during the interventions more successful. We can also use this knowledge to make interventions easier – if we need the dog to listen to our patients and obey clues, the patient’s body should be dog-oriented to make the communication clearer and more natural. If this is not possible, try to find other solutions that would be suitable for your dog and familiar for the dog in the situation. In the beginning, lack of understanding between patient and the dog may be very frustrating (for both sides). It is our goal in training to teach the dog to listen and understand different kinds of people.



While visiting patients, or conducting therapy sessions, the handler often needs to focus on clients, so it is helpful when the dog is prepared to stay focused while the handler's attention is divided between the client and the dog. Training different commands in different handler body positions may also be useful as many clients (seniors, people with disabilities) cannot stand in front of the dog – rather, they sit on a couch or wheelchair. Some of the clients are not able to make eye contact, so it is important to train for that too.

When we talk about communication, it is important to realize it is about a **mutual relationship**. We need not only to focus on a dog's understanding and proper reaction to our clues/commands, but also on our understanding of a dog's body language. During AAT or AAE with dogs, tough or stressful situations may arise. Dogs will communicate that and expect the handler to resolve the situation. If the handler responds with empathy and addresses the needs of the dog, the good communication between handler and dog will continue. However, if the handler ignores stress signals, fear reactions or other distress determinants, the dog may try to communicate differently. One of the possibilities is to reinforce the signals and start to use threatening signals.

Another possibility is that the dog changes its coping mechanism and becomes passive. **It is crucial not to miss signals connected with this state of a dog's mind**. Some of the handlers are happy that the dog habituated so well to the situation that it is lying in a "calm" way. The truth is the opposite – the dog is hoping to get out of the situation. To assess whether your dog is comfortable (enough) in a situation you can check if your dog is eating/taking treats and/or playing like they normally do.

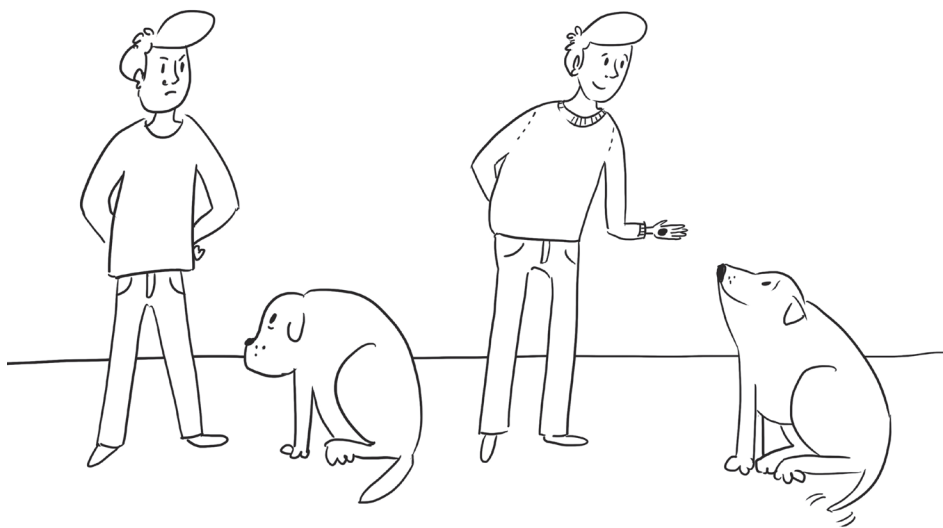
For more comprehensive information on this topic, please review the previous handbook: "Animal Assisted Activities with Dogs. Guideline for basic requirements & knowledge" (Wolfhart & Sandstedt, 2016), in particular Chapter 7.

Emotions

Dogs have emotions - new research is revealing more and more similarities between humans and dogs and emotions. For us, the AAI handlers and professionals, the emotions that our dogs experience during the intervention or visit are very important. We know from human psychology that during positive emotions, we (and also dogs) strive to sustain the behaviour, situation or interaction. Negative emotions stop us from performing the behaviour or willingness to be in a specific environment. What's important is that emotions are associated with the situation and even when the main stimuli are not met – we, as well as the dogs, remember the feelings about a similar situation.

AAI training and sessions should be associated with positive emotions, so the dog would prefer to stay in situations rather than skip them. The emotions of the dog, its body language and willingness to interact are important factors to have in mind working with dogs in AAI.

We can, through proper training, make positive experiences for the dog in particular situations. But we cannot be in charge of everything; unexpected things may occur, and the dog can have other experiences as well. The more positive experiences we give the dog, the better the dog can handle a negative experience. Training for AAI is reward-based. So, the dogs learn that these kinds of specific situations – approaching strangers, playing and petting with them – relate to nice things, like food, toys and attention. At this point, the dog starts to have good emotions about it and expects nice things to happen. After proper training, we can take advantage of these good emotions and make a good and pleasant intervention for all the participants. On the other hand, if the training is based on aversion, the dog starts to have bad feelings about it and the distress becomes greater during the intervention. Even if the aversion is used only in specific elements of the training, for example to teach the dog not to jump on the person, there is a high probability that the dog will start to expand his insecurity into all connected activities, not only with jumping.



It is important to make sure that the dog feels safe and relaxed before we start training or working with the dog.

To build positive emotions during the sessions:

- Use positive reinforcement as the primary training method.
- Remember about achievable goals – too high expectations may be frustrating for both you and the dog.
- Do not use aversion or pressure to stop behaviour – it is better to shape the desired one and use a reward as a reinforcement.
- Observe the dog and finish the sessions before the dog is too tired or discouraged (especially at the beginning of your training and work).
- Train the dog to have positive expectations – food rewards, play and nice contact with people.
- Remember the dog's welfare in everyday life.
- Take care of your handler-dog relationship, as a support for the dog in tough situations.
- Remember about proper socialisation to prepare the dog to cope with the environment and people.

Empathy

For many owners, it is quite evident that dogs are empathic. 64% of dog owners in Britain believe that their dogs can feel empathy (Morris et al. 2007). Researchers have tried to answer the question of whether dogs can feel empathy, with many trials and tests. One of the protocols first used was on human infants, and it showed positive evidence of empathy. The dogs were listening and observing different human crying (test), talking (control group 1) and humming (control group 2). The dogs reacted differently (showing submissive behaviours) on human crying than other situations, which may be proof of empathic feelings. Many researchers use different protocols to find out how many different empathy-based behaviours we can observe – are they indeed empathy, or just our interpretation?



References

- Barstad, B. J. (2014). Evaluation of animal welfare in dogs working with animal assisted interventions for elderly people with dementia. (Master), Norwegian University of Life Sciences. Available from Bibsys Brage database.
- Cohen-Mansfield, J., Dakheel-Ali, M., & Marx, M. S. (2009). Engagement in persons with dementia: the concept and its measurement. *Am J Geriatr Psychiatry*, 17(4), 299-307. Doi:10.1097/JGP.0b013e31818f3a52
- Fratkin, J.L., Sinn, D.L., Patall, E.A., & Gosling, S.D. (2013). Personality consistency in dogs: a meta-analysis. *PloS ONE*, 8(1), e54907-e54907. Doi:10.1371/journal.pone.0054907
- Gácsi, M., Miklósi, A., Varga, O. et. Al. (2004) Are readers of our face readers of our minds? Dogs (canines familiarizes) show situation-depend recognition of humans attention. *Animal Cognition* 7, 144-53
- Lakatos, G. Dóka, A., Miklósi, A. A comparative approach to dogs (*Canis familiaris*) and human infants' ceomrehension of various forms of pointing gestures. *Animal Cognition* 12, 621-31
- McConnell, P., & Fine, A.H. (2015). Chapter 9 – Understanding the Other End of the Leash: What Therapists Need to Understand about Their Co-therapists *Handbook on Animal-Assisted Therapy (Fourth Edition)* (pp. 103-113). San Diego: Academic Press.
- Met A, Miklósi A, Lakatos G (2014) Gaze-following behind barriers in domestic dogs. *Anim Cogn* 17(6):1401–1405
- Pang, J.-F., Kluetsch, C., Zou, X.-J. et al. (2009) mtDNS data indicate a sigle orgin for dogs south of Yangtze River, less than 16300 years ago, from numerous wolves. *Molecular Biology*
- Range, F., Heucke, S. L., Gruber, C., Konz, A., Huber, L. & Virányi, Z. (2009). The effect of ostensive cues on dogs' performance in a manipulative social learning task. *Applied Animal Behaviour Science*, 120: 170-8. doi:10.1016/j.applanim.2009.05.012
- Sarviaho, R., Hakosalo, O., Tiira, K., Sulkama, S., Salmela, E., Hytönen, M.K., Sillanpää, M.J. & Lohi, H. (2019). Two novel genomic regions associated with fearfulness in dogs overlap human neuropsychiatric loci. *Translational psychiatry*, 9(1), 18-18. Doi:10.1038/s41398-018-0361-x
- Virányi, Z. Top ál, J. , Gácsi, M., Miklósi, A., Csányi, C. (2004) Dogs respond appropriately to cues of humans' attentional focus. *Behavioural Processes* 66 (2004) 161–172
- Wallis LJ, Range F, Müller CA, Serisier S, Huber L, Virányi Z (2015) Training for eye contact modulates gaze following in dogs. *Anim Behav* 106:27–35
- Wohlfarth, R., & Sandstedt, L. (2016). *Animal Assisted Activities with Dogs – Guideline for basic requirements & knowledge*. Publishing House of Janusz Korczak Pedagogical University in Warsaw Erasmus Plus project.

CHAPTER 7.

Personality assessment for dogs in AAI

Prepared by Dr. Christine Olsen



Many organizations evaluate dogs in terms of how well they perform easy tasks such as putting their head in a lap, walking on a leash, doing some tricks, etc., rather than looking at fearfulness, sociability, responsiveness to training, aggression, boldness and activity. That is understandable. It is much easier to have an “obedience-competition” than to try to analyse behaviour and personality in dogs. This requires special education and understanding in animal behaviour, observation technique, analysing, standardization, systematization etc. Animal-assisted interventions is said to be a multiple interdisciplinary field, and this is also true when it comes to evaluating animals.

In another Erasmus+-project (Personality Assessment For Dogs In AAI), the research group is working on standardization of an evaluation protocol that will look at the individual dog’s personality and its ability to be trained to work in AAI. The protocol developed through that project looks at certain traits and measures them with a Likert scale. Fratkin et al. (2013) states that behavioural ratings are more reliable than behavioural codings. They find that dog personality consistency estimates are higher when using behavioural ratings, rather than behavioural codings.



Testing age

Dogs, as with humans, have different personalities, and just like humans, their personality is not fully developed until they reach maturity.

In AAI it’s not only the dogs that are entering the intimate zones of humans, but humans are also entering the intimate zones of the dogs. Proxemics deals with the amount of space that one feels it necessary to set between oneself and others (Aiello & Aiello, 1974). There is little research on proxemics in dogs, but there is quite a lot regarding human proxemics. We assume that dogs also have these zones (MacNamara & Butler, 2010). All breeds, irrespective of whether they are bred for fighting, guarding, hunting or herding, will be social and have small personal zones as puppies and young dogs, because they are dependent on someone to bring them food, clean them etc. As they grow older and reach maturity the personal space will expand, dependent on the breed and the dog’s personality. In humans, research shows that the proxemics is fully developed at the age of twelve (Aiello & Aiello, 1974).

Children have small personal zones, but as they reach maturity these will expand. Even with adults there are big differences in how close one is comfortable to be around others. Some people hug others, even strangers, while others find all this hugging very embarrassing. Personality develops over time, and the personal zone, in particular, won't be established until the dog has matured, neither will different forms of aggression or anxiety. That's why we recommend that dogs should be fully matured when they are tested for suitability in AAI. The point at which their personality is fully developed will vary from breed to breed. Some small breeds develop early, sometimes as early as 14 to 16 months; other breeds like big breeds are very late maturing, some as late as 2.5 to 3 years of age.

But the most important thing is that there is no hard evidence that adult behaviour can be predicted at an early age. In their meta-analysis on personality consistency in dogs, Fratkin et al. (2013) looked at consistency on the personality dimensions aggression and submissive behaviour for dogs, tested at puppy age and adult age. Responsiveness to training and fearfulness were significantly less consistent than aggression and submissiveness but not activity. Activity ($r=0.26$) was significantly less consistent than submissiveness and marginally less significant than aggression (Fratkin et al., 2013). In contrast, there was no significant variation in consistency by personality dimension among adult dogs, meaning that what you see in one test is likely to be the same when you test the dog again, no matter when (Fratkin et al., 2013). However, it must be emphasised that personality dimensions are not fixed properties of individual dogs but may also be influenced by environmental and social manipulation and change (Fratkin et al., 2013).

Traits to look for in a personality test

Traits are often classified in terms of personality dimensions. Personality dimensions relevant for AAI would be fearfulness, sociability, responsiveness to training, aggression, boldness and activity.

Fearfulness

For dogs working in AAI, the most important trait is fearfulness – or let us rather say, lack of fearfulness. Although fear is an emotional state that is crucial

for survival in all animals, increased fearfulness in dogs can cause substantial animal welfare problems. Fear may motivate bite injuries, which of course under no circumstances should happen in AAI. Fearfulness can be categorised into social and non-social fearfulness. The social category includes fear of unfamiliar people and dogs (Sarviaho et al., 2019). Dogs evaluated to work in AAI should not be afraid of different people or other dogs. The non-social category includes fear of different objects such as new situations, loud noises, heights, shiny or slippery floors, etc. (Sarviaho et al., 2019).

Fear of unfamiliar people and fear of new situations are highly correlated in dogs, and they are both considered to be signs of generalized fear (Sarviaho et al., 2019). Of course, traumas or lack of socialization, poor maternal care and aversive training are known risk factors for fear in dogs, but high heritability estimates (range from 0.36 to 0.49), indicates a substantial genetic component to this trait (Sarviaho et al., 2019).

Dogs vary in their response to novel situations and unfamiliar people, with reactions ranging from extreme fearfulness to high sociability and curiosity (Sarviaho et al., 2019). Dogs working with AAI ought to be in the last category – highly sociable and curious.

Sociability

Sociability is the dog's willingness to interact with friendly strangers under different circumstances. Some dog owners misunderstand submissive behaviour and interpret a dog that climbs on people and/or licks them in the face as very social. Most often dogs that behave like that seek social support in situations they feel uncomfortable in, which means they are fearful, and not necessarily social. The dog's willingness to interact with strangers is of course essential in AAI, and even though this is an inherited trait, the dog may learn to have positive expectations to social interactions with humans.

Responsiveness to training

Most interventions where dogs work in AAI also acquire some learned skills. Responsiveness to training is the degree to which the dog is willing to work with people, its playfulness and how quickly they learn. It can be mapped by, for example, rating playfulness, overall reaction to the environment, engagement, etc.

Aggression

Aggression is not a trait we should see in dogs working in AAI. Dogs may show aggressive behaviour in different situations, so aggression may be assessed in different situations, for example, letting the dog pass an unfamiliar dog, and assessing for resource defence and bite inhibition.

• Aggression towards other dogs

Aggression towards other dogs is unwanted primarily because of welfare issues relating to the dog itself. But aggression towards other dogs will also affect the other dog in a bad manner, and people around will also be affected. Observing dogs lunging toward each other is something many people will react to with fear. Even to observe aggressive behaviour between dogs a long distance away, or, for example through a window, can be traumatic for many people.

• Resource defence

A dog can defend its resources (food, toy, owner and more) with a glance, a threatening body language, growling, barking, snarling, snapping and biting. Dogs who defend their resources are not acceptable in AAI.

• Bite-inhibition

The dog's reluctance to bite people is why bites on humans usually do not cause major injury. Bite-inhibition is also very important for safety, in conflicts, between dogs. Some dogs tend to "pinch" if someone causes them pain or discomfort. These warnings are not dangerous, but for a dog working in AAI it is totally unacceptable.

Boldness

Boldness can be defined as an individual's general tendency to approach novel objects and willingness to take risks. The dimension shyness–boldness is related to sociability towards strangers, playfulness, interest to chase, exploration and fearlessness. There are breed differences as well as sex differences with regard to boldness score, where, for example, males score higher than females (Svartberg, 2002).

Activity

Activity is where one assesses the dog's locomotor activity or general activity level.

Dogs with high activity levels may quickly become distracted by the environment. They may have difficulties processing what is important but rather react to everything. Dogs working in AAI must not be distracted by stimuli in the environment, such as nurses, smells and other things. When we work with dogs in animal-assisted interventions, it is important that the animal behaviour is predictable; the dog's reactions must be expected and relative to the stimulus. Being able to switch between being calm and passive is an important attribute for a dog working in AAI.

Conclusions

Working in AAI we must consider both nature and nurture. Preparing a dog to work in AAI is not only about training during adolescence but also about paying attention to genetics and the juvenile period.

To optimize your chances of having a suitable dog partner in AAI, you might consider the following:

- Choose a breed that is open and friendly to people and that is bred to have focus on human cues.
- Choose a dog from parents which don't have any significant behavioural problems.
- Make sure that the puppy has frequent and positive experiences with humans while it is with the breeder.
- Check if the puppy has good contact with a stable mother and siblings.
- Take the puppy home at the right age, not too early (not before 8 weeks).
- When you take the puppy home, create as good an environment as possible.

Further reading:

"The dog. A Natural History" Ádám Miklósi (2018)

"The Domestic Dog: Its Evolution, Behaviour and Interactions with People" edited by James Serpell Date of publication and publisher details needed

"Dog sense: how the new science of dog behaviour can make you a better friend to your pet" John Bradshaw Date of publication and publisher details needed



References

- Aiello, J.R. & Aiello, T. De C. (1974). *The development of personal space: Proxemic behavior of children 6 through 16*. *Human Ecology* 2(3):177-189. DOI: 10.1007/BF01531420
- Feddersen-Petersen, D. (2001). «Hunde und Ihre Menschen». Kosmos Verlag, Stuttgart
- Fratkin, J.L., Sinn, D.L., Patall, E.A. & Gosling, S.D. (2013). Personality Consistency in Dogs: A Meta-Analysis. *PLOS ONE* 8(1): e54907. <https://doi.org/10.1371/journal.pone.0054907>
- Freedman D.G., King J.A. & Elliot O. (1961) Critical period in the social development of dogs. *Science* 133
- Haworth, C.M., Dale, P., & Plomin, R. (2008). A Twin Study into the Genetic and Environmental Influences on Academic Performance in Science in nine-year-old Boys and Girls. *International journal of science education*, 30(8), 1003.
- MacNamara, M.A., & Butler, K.A. (2010). Animal selection procedures in animal-assisted interaction programs. In A. H. Fine (Ed.), *Handbook on animal assisted therapy. Theoretical foundations and guidelines for practice* (3rd ed.) (pp. 111-134). San Diego, CA: Academic Press
- Miklósi, Á (2015) “Dog behaviour, evolution and cognition. Second edition”. Oxford University Press
- Miklósi, Á (2018) “The dog. A Natural History”. Ivy Press, Bringston
- Rosenström, T., Gjerde, L., Krueger, R., Aggen, S., Czajkowski, N., Gillespie, N., Kendler, K.S., Reichborn-Kjennerud, T., Torvik, F.A. & Ystrom, E. Joint factorial structure of psychopathology and personality. *Psychological Medicine*, 1-10. Doi:10.1017/S0033291718002982
- Sarviaho, R., Hakosalo, O., Tiira, K., Sulkama, S., Salmela, E., Hytönen, M.K., Sillanpää, M.J. & Lohi, H. (2019). Two novel genomic regions associated with fearfulness in dogs overlap human neuropsychiatric loci. *Translational psychiatry*, 9(1), 18-18. Doi:10.1038/s41398-018-0361-x
- Svartberg, K. & Forkman, B. 2002 . Personality traits in the domestic dog (*Canis familiaris*), *Applied Animal Behaviour Science*, Volume 79, Issue 2, 2002, pp.133-155, ISSN 0168-1591, [https://doi.org/10.1016/S0168-1591\(02\)00121-1](https://doi.org/10.1016/S0168-1591(02)00121-1)

CHAPTER 8.

'Applying learning theory to AAI practice

Prepared by Line Sandstedt



Training for AAI

To help the animal-assisted intervention run smoothly, we should have well-behaved dogs who respond readily to the therapist and client. A dog that knows what is expected of it will stay more focused which will, in turn, prevent the dog from becoming distracted (VanFleet & Faa-Thompson, 2017). Staying focused will also help the dog feel more secure, thereby promoting good animal welfare.

Research shows that the amount of experience a dog has with human behaviour or training affects how they communicate with people (Range & Virányi, 2017). For a dog working in AAI, this means that their handler must be there to support and help them if needed. In one study the Norwegian Centre of Anthrozoology found that the dog tended to look at its owner when it did not understand what the client wanted it to do (Olsen & Myren, 2011).

Studies also state that dogs who have only basic obedience training are less pro-active problem-solvers than dogs who have been trained extensively in a dog sport (such as agility, obedience, tracking etc). These researchers also showed that dogs that had received more training, communicated differently to humans (Marshall-Pescini et al. 2009; Osthaus et al. 2003, 2005; Range et al. 2009). In more extensive research it is seen that a dog's learning ability is different depending on breed, upbringing, experience and so on. We also see that dogs can quickly adapt, and they can learn to respond to cues associated with the rewards they want.

Dogs have a well-developed emotional system which makes them more responsive to feelings rather than cognitive reactions (Hallgren, 2015). Therefore, it is important to pay attention to the dog's feelings in the training situation. The dog will learn the emotion in a situation, not only the behaviour. This means that if your dog is feeling safe and content in one situation, it will probably feel safe and content in a similar situation in the future. We can, however, change the dog's emotions through training. For sure, we all want therapy- or school dogs to be happy and content in their work with clients.

Reward-based training is important for dogs working in AAI. Reward-based training is about rewarding the desired behaviour, so that the probability of

the dog displaying that behaviour increases. You can read more about this in “Animal Assisted Activities with Dogs – Guideline for basic requirements & knowledge” (2016) In this introductory book we also write about socialization of puppies and young dogs for this kind of work.

Dogs that are working in AAI should know how to behave in everyday life. Exercises that the dogs should know include:

- Walk nicely on a leash
- Sit and stay
- Lay down and stay
- Recall
- Greet people nicely

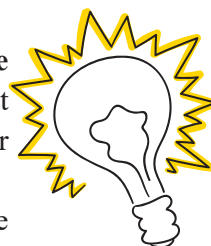
Good everyday obedience

By teaching the dog good habits in everyday life, you make life easier for both the dog and you. This is especially important for dogs that are a bit impulsive; they will learn through training to be better at controlling their impulses. Working in AAI, the dog must be able to inhibit its impulses. As many everyday situations as possible should be brought into the training sessions. Have the dog sit before it is allowed to enter a door; teach the dog to sit when it is saying hello to people; teach the dog to walk nicely on the leash; make the dog sit and wait before it gets to something it wants. If you start this training when the puppy is young, it will be easier for the adult dog to know what to do in different situations.

These things are quite easy for the puppy to learn straight away. If your puppy wants to go out the door, and you reach for the door-knob and then wait for the puppy to sit down before you are opening the door, the puppy will learn that when it sits down, the door will open, and it can go out. Here you are using Premack’s Principle - more probable behaviours will reinforce less probable behaviours (Ostaszewski, 2000). In this case, the dog will perform a behaviour that they would be less interested in performing (sit and wait at the door) in order to gain access to performing the behaviour that they would prefer (go out the door).

When the dog has got the idea of sitting until the door opens, it can be useful to teach the dog to wait for your “ok - you are free to go” release-cue before they can enter the door. If the dog is running for the door as soon as you open it, you can just shut the door again. When the puppy stops and sits down again, you can try to open the door; if the puppy then keeps on sitting, you can give the release-cue. You have to give the release-cue very early, the first time the minute you open the door, and after a while you can make the puppy sit longer and longer before you give the release-cue.

In this exercise it is smart to teach the dog a cue for “**ok – you are free to go**” (release-cue). If the puppy is just sitting or standing and doesn’t understand that it is free to go, you can just throw a treat on the other side of the door at the same time as you give the dog the “release”-cue. Another good habit to teach young puppies is to never let them pull the leash and get rewarded for it. Dogs mostly do what pays off for them, so if they are never rewarded for pulling on the leash they will not pull (see further down: Walking nicely on a leash).



When you start training your dog as a therapy or school dog, the dog should know these basic exercises. So, we’ll just take some time to explain one of these exercises which is often problematic for both dogs and people. When teaching the dog to walk nicely on the leash people often tend to use a lot of negative reinforcement and positive punishment. This, we strongly do not recommend.



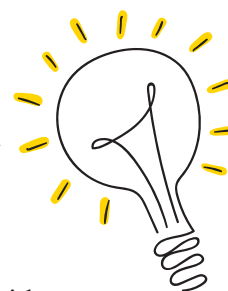
Walking nicely on a leash

(leash approximately 1.5 meters)

You start your training by rewarding the puppy for walking nicely by your side. When the puppies are young and have not learned how to pull the leash, it is quite easy to teach them how to walk nicely by our side. Reward the puppy

for walking by your side; change direction often and encourage the puppy to follow you; mark the behaviour you want and reward the puppy for doing what you want it to do. Start in a place with few distractions, and gradually, as the puppy learns what you expect from it, include more distractions. Until your dog learns how to behave on leash, consider all walks to be training sessions. Keep training sessions frequent, short and fun for your dog. If the puppy starts to get very excited when you put on the leash and it expects you to go for a walk, it will be better to wait until the puppy calms down before you go out.

If you do not have time to dedicate to training in this way, you can put a harness on the dog. If you do this consistently the dog will, after a while, associate the collar with walking nicely on the leash and the harness with doing a little bit as it likes.



For dogs that are pulling the leash

Every time the puppy/dog pulls the leash to get forward, you should either stop or start walking backward the other way; when the dog looks at you/follows you, you can start to go forward again. Repeat the procedure when the dog starts pulling again.

The reward for the dog is being able to go forward. Often this method does not require treats or other forms of reward. It is often enough just to let the dog go the way it wanted to go and give it some verbal reassurance that this was the behaviour you wanted.

It is not so easy being consistent in this training. Sometimes when we are in a hurry and we do not have the time to bother about this, the dog will experience that it is suddenly rewarded for pulling (reward for the dog in this situation is to be able to pull in the direction it wants).

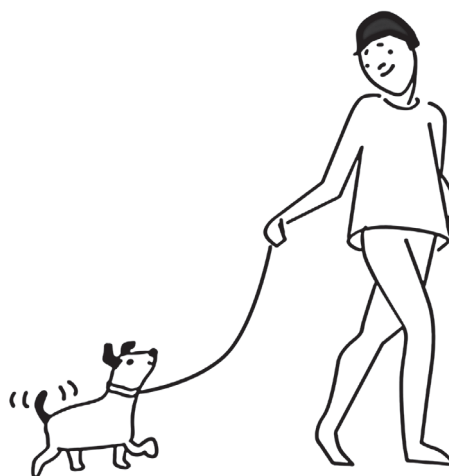
When the dog learns that the rule (not to pull) does not apply every time, and the behaviour is randomly rewarded (you can read more about random rewarding in Animal Assisted Activities with Dogs - Guideline for basic requirements & knowledge) the behaviour will be more likely to happen, thus the dog will pull more.

You can train the dog to walk nicely on the leash in everyday situations - when your dog wants to go somewhere, to say hello to someone, to get to a place to sniff, or if the dog wants to hurry along etc. You can also train this between two or more bowls of food. You can put out two bowls of food with some distance

between them (or you can have a helper that puts food in the bowls). Then you can show the puppy that you put the food in the bowls. Then you start and walk towards the bowl, “mark” and let go of the leash so the puppy can run and grab the food in the bowl in front of you. If you have a helper, the helper can show the puppy that it places some food in the bowl, then you can turn to the other bowl and walk towards it; if the puppy does what you want “mark” the behaviour, let go of the leash and let the dog take the food in the bowl in front of you. If you are a little bit late, and the puppy starts pulling, you can turn and start walking towards the other bowl, “mark” and reward the right behaviour.

It can be smart to start every walk with this collar and leash training, and then switch to the harness before both the dog and you are tired of walking nicely.

Just before the end of the walk you can take off the harness and train a little bit of walking nicely on the leash again. If you do this every time you are walking the puppy in the first couple of months, the puppy will learn the game “walking nicely on the leash”.



For other basic exercises, we recommend you go to a puppy class or to a dog school, to get help with the “everyday behaviours” (the behaviours mentioned above).

Successful AAI

To conduct successful AAI, we need to prepare the dog for the task. What is unique about working in AAI compared to any other dog activity, is the dog’s focus. In AAI the dog’s focus should be on the client and not on the handler/owner. The interaction between the client and the dog is what makes AAI so special.

An example

If the client is throwing a dummy for the dog, we can have the following scenarios.

1. The dog is delivering the dummy to the owner.
2. The dog is delivering the dummy to the client.
3. The dog takes the dummy and goes to hide somewhere.

Can you take a couple of minutes to think about the difference?

It is essential that the dog delivers the dummy to the client and not the handler. If the dog delivers the dummy to the handler or goes off somewhere else the outcome of intervention will suffer. You can read more about this in the chapter: Relationships in animal-assisted interventions.

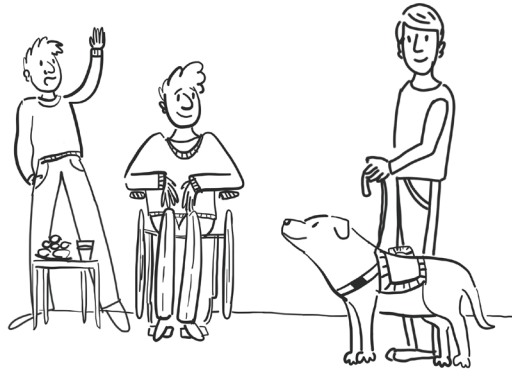
The dog also must be able to interact with different kinds of people. It is essential that dogs are only working with user-groups that they are comfortable with. In your training you should prepare your dog to work with clients of different ages and with different physical or mental capabilities.

Regarding the difference between working in AAI and other dog-related activities, another thing to think through is the energy level of the dog. In other dog activities such as agility, obedience, tracking or free style the dog's energy level is quite high. In AAI, often a lower energy level is required. The level of energy can be managed, and the dog can learn which energy level the intervention requires. People tend to get insecure if a dog is too intense, and dogs with high energy levels are often hard to predict.

It is also important to have the environment in mind when considering the dog's arousal and activity level whilst working. Slippery floors are common in institutions; if the dog is too speedy the risk of the dog injuring itself is quite high.

The work environment for dogs working in therapy or in schools is quite difficult. Thus, it is important to teach the dog to work with a lot of disturbances. What does your dog do if you ask it to sit with a lot of screaming kids around

you? Does your dog listen to you while there is someone calling it with a treat in their hands? What does your dog do if someone is holding its collar while working? We can't prepare the dog for everything they could possibly experience while working, but the more experiences you give your dog regarding "strange" things happening, the more prepared you and the dog will be for unexpected things that may happen in the intervention.



How to train

For basic training and learning theory, please refer to the book *Animal Assisted Activities with Dogs - Guideline for basic requirements & knowledge* (2016). In this chapter we will give you the knowledge about how you can teach the dog different exercises to use in therapy and school interventions. We will start with a short refresher from the first book.

We recommend that you keep a training diary. You will then be more systematic in your training of the dog, and training will move forward more quickly and be of better quality than without a training diary.

The law of learning:

1. First Law: ***Behaviour that is rewarded is most likely to be repeated.***
A reward for the dog is not always what we, as humans, think of as a reward. An example: If the dog jumps at you and you give it attention (good or bad), the dog will continue doing the same behaviour whenever you come home.
For the dog, the attention itself is a reward; it does not matter if it's good attention or bad attention.
2. Second law: ***Behaviour that is not reinforced over time, will most likely stop*** (extinguish). When you come home to your dog, pay no attention to it while it's jumping; when the dog relaxes you can pay attention to it. After some time, the dog will not jump when you come home.
The same thing will happen to behaviours that you have taught the dog, for example the "sit-on a cue"; if you stop reinforcing the dog when it's doing the "sit", the sit-cue will get extinguished.
3. Third law: ***Once a behaviour is established, a variable (unpredictable to the dog) schedule of reinforcement will make the behaviour stronger.***
If you come home wearing old clothes and you say "hello" to the dog and the dog jumps, the day that you are not bothered because of the old clothes, and you greet the dog even if it is jumping, the dog will keep on jumping. You have now variably rewarded the dog, and the behaviour has been reinforced.

By putting a behaviour on a variable reinforcement schedule, we make the behaviour more resistant against extinguishment.

There are 4 essential factors which increase the quality of training:



Criteria



Timing



Quality of the reward



Variability in rewards

Criteria

What is criteria in dog training? Criteria is the contract we have with the dog about the behaviour it needs to perform to get the reinforcement. The level of difficulty of criteria increases as the dog matches its behaviour to the current criteria we are looking for. It is important that we set the “right” criteria when training.



Timing

It is important that you mark the correct behaviour precisely. If I am trying to teach my dog to sit, it is essential that I reward the dog when the dog is sitting down. If my timing is not good, it can be that I reward the dog when it is doing something other than sitting.



Quality of the reward

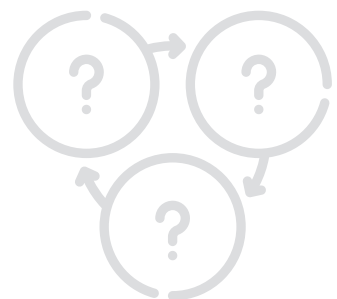
It can be an advantage to use “high-value” treats when you are training the dog; the dog will be more motivated and more eager to learn. What the dog considers to be a reward is individual and depends on what activates the dog’s motivation system and what engages the dog. A reward can be social, something to eat, playing or something in the environment.

In Animal Assisted Activities with Dogs - Guideline for basic requirements & knowledge we asked the question: Is a “reward” always a reinforcer?



Variability in rewards

You must be conscious about how you use rewards. In the beginning we reward the dog every time the dog does the right behaviour (see Animal Assisted Activities with Dogs – Guideline for basic requirements & knowledge). When the dog “knows” what to do, we put the behaviour on a variable reward pattern. We then have to start training the dog to work longer and longer durations before we reward it. Dogs that are working in AAI must be able to



work for quite a long time before they get the reward. After a while some of the dogs find the work so rewarding in itself that praise and cuddles are enough reinforcement for them. But for other dogs their rewards are very important, so they really need to be reinforced with things other than just cuddles and praise. In these cases, you, as the handler of the dog, have to figure out what kind of “rewarding regime” suits your dog and yourself the best.

Besides these factors, learning is also influenced by the environment (for example, can the dog really focus on the task?) and the atmosphere between the handler and the dog (for example, does the dog feel comfortable? Is the handler a sensitive teacher?).

We can choose rewards based on what kind of intensity and what kind of feelings we want the dog to have in an exercise. For example, when we do the recall, we want the dog to be happy and joyful, so that they really love to come to us. That’s why it can be an advantage to use play as a reward in this exercise. You can then play together with the dog, to strengthen the contact between the dog and yourself; do not just throw a ball for the dog to play with on its own. If you want the dog to be calm, it is a good idea to use treats as a reward. Depending on the dog, you can vary the amount of food given. Dogs are like us humans – their bodies react to food by releasing hormones that makes them calm and relaxed. For a therapy or school dog that really appreciates cuddles and physical contact, you can use this type of touch for rewarding the dog for being close to a client, for example on a sofa. If we were to start playing with the dog, the dog could get over excited or food can often distract the dog’s attention away from the client.

Success rate

When you are training, you can calculate the dog’s success rate. How often you are rewarding your dog tells you about the success rate. It will help you to find out how many times the dog has offered the behaviour that meets your criteria, compared to how many times the dog has offered a behaviour that does not meet your criteria (Ulrich & Ingerslev, 2014).



Calculating the success rate:

Success rate % = $\frac{\text{number of correct responses}}{\text{number of responses in total}} \times 100$

Success rate = $8/10 \times 100 = 80\%$

Success rate = $4/5 \times 100 = 80\%$

Success rate = $3/5 \times 100 = 60\%$

A good rule of thumb is that we want to maintain a success rate of at least 80%. When your criteria are too high for the dog and the behaviour offered does not meet your expectations, do not lower the criteria in that training session. When you recognize that your expectation is too high, take a break and think through your plan. If you start lowering your expectation in the same training session, the dog will after some time find out that if it does not understand you, it does not have to make an effort and that you will eventually reach out and help it. Before you start to train your dog to “sit”, “lie down”, “retrieve” etc, there are some basic exercises that will make training your dog easier.

“A marker” for the correct behaviour.

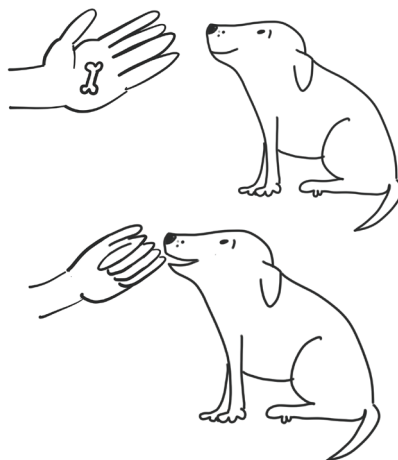
It is important that you mark the correct behaviour precisely. Some people use a clicker for this purpose; others teach the dog a word or a sign (short/precise) for marking the desired behaviour. You teach the dog to associate the sound with a reward, just as you do when you teach the dog the sound of the clicker. In Animal Assisted Activities with Dogs - Guideline for basic requirements & knowledge we wrote about Pavlov’s dogs. The dogs learned that the bell (metronome) meant food - this is the effect that you are looking for. Your word or sound is supposed to be like Pavlov’s bell (metronome); when the dog hears the word/sound, it will, without thinking, “know” that it will be rewarded. When you have made this association in the dog’s brain your word/sound is conditioned, and you can use it as a marker for the correct behaviour.



“Self-control”.

You can start to teach the dog to control itself when you have treats in your hand. Knowing this game will help the dog to focus more, and to figure out for itself what its owner wants from it.

1. You can start by having your dog sitting or standing; I think that it is easier for the dog to get the idea if it is sitting rather than standing. Start with having treats in your open hand (see picture); move your hand closer to the dog; if the dog is sitting still without reaching for the treats “mark” and reward the dog. If the dog reaches for the treats, close your hand. If the dog starts sniffing, licking or trying to use their paw to get to the treats, do not



say anything to the dog, just ignore its efforts to get to the treats. As soon as the dog withdraws from your hand, you “mark” the behaviour and open the hand and give the dog a treat (keep the hand quite close to the dog). If you are quick, you will most likely give the dog the treat while it is still standing still or sitting, then you take another treat and say a “release-cue” and throw the treat away, letting the dog run after it.

2. Start again with the hand open. If the dog stretches for the hand, close it and wait for the dog to withdraw, then “mark” the behaviour and open the hand. After a couple of repetitions, you can give the dog the “release-cue” and throw a treat away from the dog so that it can move away. By doing this, you also teach the dog to wait for the “release-cue” before it ends the behaviour.
3. When the dog is able to keep focus and control itself for a little while with the hand open, you can make it more difficult for the dog. You can move the hand a little bit, you can take it closer to the dog, you can make rapid movements etc. As soon as your dog tries to reach for the treats – close your hand.

Note:

- Have in mind that the dog should have focus on the treats all the time; do not reward eye-contact (it is quite easy to get eye-contact in this exercise, especially for dogs that have been trained in eye-contact).
- By training this you teach the dog self-control even when there are rewards present. The dog will have to focus on the task that they are doing (for example sitting, standing or lying down) to get the treats.
- At the same time, you teach your dog that when the hand is open, the behaviour the dog is presenting is the right one, when the hand closes the behaviour is not the one that you want. The dogs have to figure out for themselves what the correct behaviour is.
- Remember the “release-cue”, then the dog quite quickly learns to hold the position of sitting, lying or standing until a new cue is given.

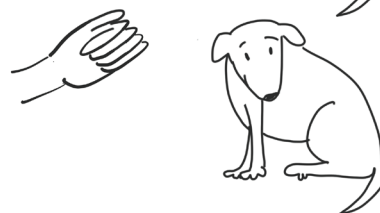
This self-control exercise can be used many times in the future training of the dog.

More about self-control:

1. You can put treats on the floor; cover the treats with your hand if the dog tries to reach for them. “Mark” the correct behaviour if the dog focuses on the treats, but at the same time really concentrates on not taking them. Have the treats nearby the dog’s front paws.



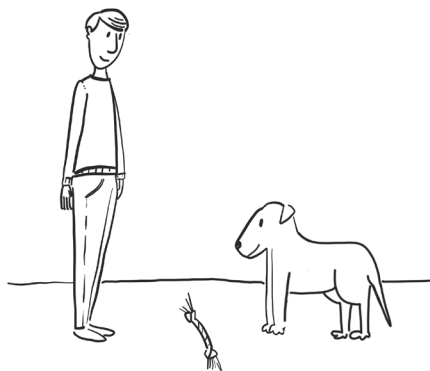
2. You can also try to give your dog a “slow treat” – you take a treat with your fingers and slowly move it towards the dog; if the dog tries to reach for the



treat, the treat goes away; if the dog is able to focus, you can “mark” the behaviour and give the dog the treat. This you can do in many different ways; you can start the movement from above, or from under the dog’s head, from quite a far distance; you can get very close to the dog’s mouth before you give the dog the “mark”, or you can give the “mark” when the hand is quite far away (then you have to be very quick back to the dog with your hand or you have to give the dog the “release-cue” straight after).

Remember to vary the rewards. You can also use toys in this exercise, just put the toy behind your back if the dog tries to get it before you have given the “mark”.

3. When your dog gets more advanced in this, you can have the dog sit or lie down and put several treats on the ground. Then you can give the dog the treats one by one, with the same rules as above. Or sometimes you can just give the “release-cue” and the dog is allowed to eat all the treats. You can do the same with toys but remember when you have “marked” and given the toy to the dog, you have to give the “release-cue” as well, so the dog is allowed to play with the toy. Sometimes when I have several toys lying around, I just give the “release-cue” and the dog is allowed to choose what toy it wants for itself; dogs often enjoy that. Remember to have the treats and the toy nearby the dog, so the dog really has to concentrate. By giving the dog several treats before you give the dog the “release-cue“, you can make it feel great while doing the exercise. Food is often connected with being calm and content. Toys, on the other hand, often make the dog more active and playful, and the dog cannot be active and playful at the same time as it is supposed to sit still; therefore, you have to remember to give the dog the “release-cue” when it is allowed to have the toy(s).



Working in AAI, it is nice to have dogs that are able to work for rewards that are not present at the time, but the dog knows that it will have the reward if it does what is required of it. We can place a bowl of treats on a shelf, for example, and the client can walk to the shelf and get the treat to give the dog after the dog has done what the client wants it to do. This is especially good for dogs that get very “high” with treats; they really have to think away from the treat and onto the task that they are working on to get the treats. It is also easier for the dog’s handler to have control over the treats. Some clients just want to give the dog treats all the time, and if the treats are nearby it is easier to “not listen” to the dog’s handler.

“A release command”

It is a good idea to teach the dog a command for “you are free to go now”, the exercise is now finished. We can use it, not only in the self-control exercise but in a lot of different tasks we give the dog.

“Re-direct your attention”

It will make the interventions easier if you teach your dog a cue for contacting you. Sometimes the clients do not behave accordingly, then it is nice to be able to get the dog’s attention and re-direct it with a little cue. You can start to train this behaviour at home by rewarding the dog for spontaneous contact. After a while you will notice that the dog will offer you eye-contact more and more, then you can put it on a cue (see further down for getting the behaviour on a cue). When you have taught the dog a cue for contacting you, it will be easier to re-direct the dog. Remember that the cue should be a nice one, like “look” or “contact” or something like that.

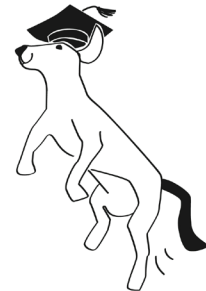


Training techniques

There are different forms of training techniques; here is an example where we use different techniques for the same behaviour.

Teaching the dog to go to a rug:

1. You can **prompt** the behaviour by putting a treat on the rug.
2. You can **shape** the behaviour by rewarding the dog when it moves closer and closer to the rug.
3. You can put the rug in any place, and just wait for the dog to go there by itself – **capturing** the behaviour.
4. You can **lead** the dog to the rug by holding/pulling the dog’s collar.



To be most effective whilst training we have to train in short sessions. This depends on the dog, but often 5 minutes is more than enough, then the dog needs a break so that the information can get from short-term memory to long-term memory. To be successful in training it is more effective to give the dog several short training sessions each day rather than one long one.

Teaching the dog a new behaviour

When we want to teach our dog a new behaviour we have to consider things such as:

- What do I want the finished exercise to look like?
- What do I want the dog to do?
- Where/when should it work (with clients in their homes, at hospitals, in schools etc.)?
- With whom does it have to work (with only me, with one client, in a group, with children, elderly etc.)?
- Do I want a sign cue as well as a verbal cue (a blanket or a sign signal etc.)?
- What kind of energy levels do I want the dog to have in this particular exercise (do I want the dog to be energetic or do I want the dog to be calm)?
- Is it a behaviour that will be easy for my dog, or is it a behaviour that the dog is not so motivated for (for example, if we are going to teach the dog to retrieve, it is good to know if the dog is very playful and likes to have different objects in its mouth or if the dog never plays and does not like to carry different objects)?
- What kind of rewards would be best in this situation?

When you have answered all these questions you will be able to find out what kind of training technique will be best for your dog, for this particular task. When you have decided what kind of technique(s) you are going to use, you should think about what kind of behaviours you do not want, and how to avoid them.

Example: retrieve

For example: You are going to teach your dog the command “retrieve”.

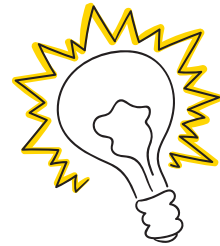
What behaviours do you not want the dog to learn?

- You do not want the dog to step on the dummy with its front paws.
- You do not want a dog that makes sounds while sitting still, waiting.

What can you do to avoid these behaviours?

To avoid the dog stepping/jumping on the dummy before grabbing it, you have to make sure that the dog knows what to do, before you throw the dummy.

You have to keep the dog's energy level low and the level of frustration at a minimum. You also need to keep in mind that the dog has to stay focused on the task at all times.



When you have considered all this, you will have to analyze the behaviour(s) you want to teach. Is it a whole task or just one behaviour? If it is a whole task for example, retrieving, you have to take apart the task and see how many small subsections you can break it down into. Then you have to teach the dog all these small subsections separately, and when the dog knows all the small parts you can put them together to form a whole task.

Retrieving:

Waiting (sitting by my side or just waiting)

Act on command

Grab the object

Hold the object

Carry the object

(Sitting by your side)

Deliver the object in the hand

(Waiting)

Be able to wait, act, grab, hold, carry and deliver and wait with different kinds of objects

Retrieving in AAI: If you want to be able to use it in AAI, you also have to teach the dog to:

Deliver the object in a lap

Deliver the object in a box

Do the exercise in a group

Additionally, you have to consider what kind of disturbances the dog could meet when it is working. Within your training you will have to prepare the dog for these circumstances.

Different places

Different sounds

Different smells

Strange people around

Other animals present?

Then after taking all these into account you can start the training of the new behaviour/exercise.

When you start to teach the dog these small subsections, you have to be good in setting the criteria, and time your rewards very exactly, therefore making it easy for the dog to understand what you want it to do.

The first thing to start with is to teach the dog one of the subsections you have broken the exercise down into. Which part you start with will vary from dog to dog and exercise to exercise. When you have taught the dog every step separately, you can put them together in the whole exercise. By teaching the exercise step by step, it is easier for the dog to understand what to do. With this approach, it is easier to increase the motivation in the dog for each subsection and it will make it simpler to take out a part of the exercise that you want to have to focus on.

Conditioning the cue

You can read more about this in *Animal Assisted Activities with Dogs - Guideline for basic requirements & knowledge* (2016).

Here is an example of how to condition a cue with different learning techniques:

1. I am using **prompting** to teach the dog to go on the rug. Then I am conditioning the cue just before I put the treat at the rug (when I know that the dog will run to the rug when I put the treat on it). I say the cue and put the treat on the carpet. After doing this for some time I will try to fade away the prompt. It is very important that the cue comes before the prompt, otherwise the dog will not make the association between the cue and the prompt and the behaviour.
2. I am **shaping** the dog to go on the rug. When I get the behaviour under **stimulus control**, and the dog runs to the rug every time I put the rug down, I can condition the cue. I then say the cue when I see that the dog runs for the rug. The best thing would be if I say the cue when the dog is thinking about running to the rug, but that is not so easy, so the second best is to give the cue as soon as you see that the dog is running to the rug. When I am training to get the behaviour on a cue, I do not reward the dog for just running there without me giving the cue first.

3. I am **capturing** the behaviour when the dog is on the rug. As soon as I get the behaviour frequently, I first put on the cue while the dog is on the rug. Then I am trying to notice when the dog is heading for the rug and try to give the cue when the dog is thinking/heading for the rug.



- When I am training to get the behaviour under stimulus control, I do not reward the dog for just running to the rug without me giving the cue first.
4. I **lead** the dog to the rug. Here I can start to put on the cue immediately, because I am quite sure that the dog will go to the rug.

Training for AAI (generalization)

When I am training for AAI it is important that I know that the dog is able and willing to perform the exercises when we, the dog and I, are working. This is why it is important to generalize the exercises. By generalization the dogs learn to perform the exercises in different environments, with different people, on different commands etc.

1. When I have got the new behaviour on a cue, I start to teach the dog to generalize the cue and I teach the dog to react to different ways of pronouncing the cue. I also teach the dog to respond to different objects in the training.
2. Then I start generalising the behaviour with disturbances. I can, for example, start with having a person coming in the room while I am training the exercise; I can have someone talking nicely to the dog; I can have kids going around in the room etc. I can also have someone laughing and talking when I am training the dog. Start with people at a distance, then move closer and closer to them. You can have someone calling the dog while you are training it. You can also add another dog, if you are working in an environment with more than one dog present at the time.
3. Then I teach the dog to do the exercise with different kinds of people, first with people the dog knows and then with strangers. This is especially important for dogs that are supposed to work with people they do not know. Then, other people, and people of different ages. It can also be an advantage to ask people to act a little bit strange when they are training with the dog.
4. When the dog is able to do the behaviour together with different kinds of

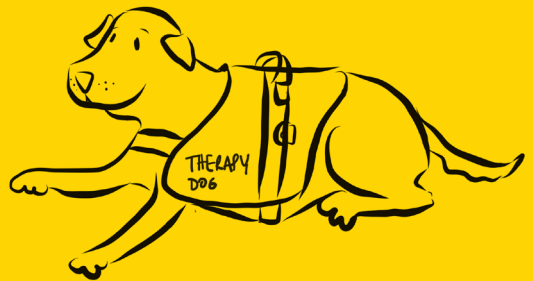
people and with disturbances, you can take it further, if there is the need for it, and teach the dog to work with more than one client at a time.

5. Then, you can do all this in different places. It is a good idea to first start in a place the dog knows, maybe a friend's house or something like that. Then you could do it in your work place, first with only you present and then with some co-workers and other disturbances.

It is important to have in mind that you lower your criteria each time you add something new. For a short time, you can allow your success rate to be approximately 60% when you are adding something new. If you get under 60% for a while, it could be that the criteria are too high. You should quite quickly get up to 80%.

"Routines"

We can make the work easier for the dog by having good routines. Dogs like to have predictability, and by having routines while we are working we will help the dog feel secure and safe. Often, we use "working signs" (uniform) like a special harness and/or a special collar on the dog when we are working. Use the equipment while you are training, so that the dog gets used to it. We want the dog to associate the "working signs" with positive emotions and safety. We hope that the dog will recognize the situation and feel safer and more relaxed in the working situation.



"Animals in control"

We all know that both humans and animals like the feeling of control in different situations. Imagine that you visit the dentist and the dentist just starts working in your mouth without asking you if it is ok or explaining what he/she is doing. You don't even know how long the procedure will last and you cannot stop the procedure. How will you feel?

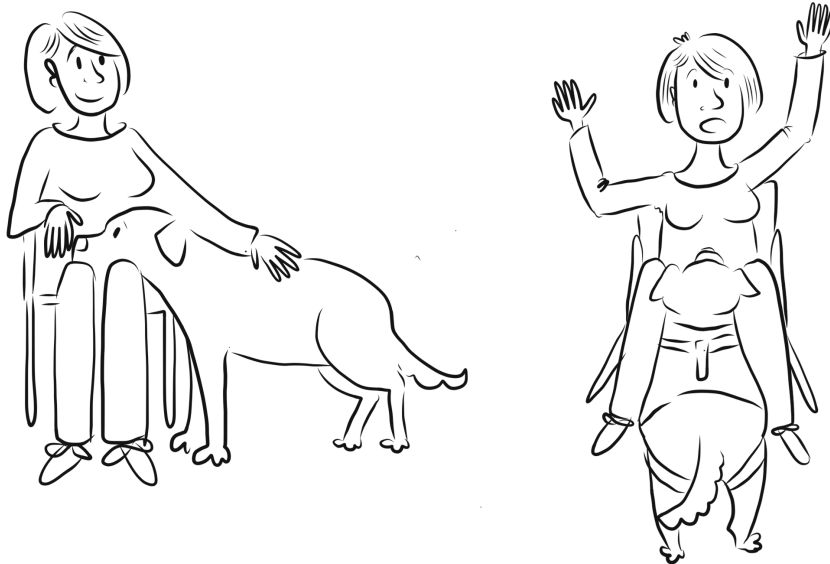
Regarding dogs, there has been a tradition of not asking if it is ok to do unpleasant things to them. Often dogs do not have any chance to stop the

procedure and they lose all sense of control. Recently there has been more interest in training animals to express their feelings and their needs. In Norway there is a project where they have taught horses to express if they want to have rugs on, or if they do not want to have rugs on. We can teach the dog to tell us what it wants in different situations. I am sure that your dog has a lot of experience in asking you for its dinner, to go out or just getting some attention from you. My dogs mostly show the same behaviour for different things they want or need. They look at me and try to lead me out of the room if they want to go out for a pee, want to go for a walk, want some water or even if they want something completely different. We can teach the dog to be more specific in showing us what they ask for. We can teach the dog to scratch the water bowl if it wants water, or to ring a bell if it wants to go out for a pee. We can also teach the dog to make choices, like the example with horses and rugs. In AAI we can sometimes let the dog choose which kind of game/exercise it wants to do. We can also teach the dog a start-button (keep on) and a stop-button (no/stop). Another thing we can teach the dog is for it to decide for how long it thinks it is ok to have its head in a client's lap. We can, for example, teach the dog that when it moves its head up, the petting will stop. Then the dog has a stop-button for having the head in a lap. This is an area that is quite new in dog training and we need a lot more research and practical experience in this kind of thinking and training. By knowing more and being able to give the dog more real choices, the dog will have more sense of control. In addition, your relationship with your dog will develop and get better when you and your dog are on more equal terms.

We believe that the interventions also will improve when the dog has some choices in activities and is also in control of the situations. It could be that the clients will also feel better, knowing that the dog chooses to be in the situation and that they can give the dog the opportunity to choose different activities.

The dog's position

When a therapy or school dog says hello to clients or pupils that are sitting, we would like the dog to say hello from the side, not from in front of the clients. Even when the clients are standing it is less fearful to have a dog that doesn't rush directly to the front of them. When the dog comes in front it is also easier for the dog to sniff the client's crotch, which can be an uncomfortable situation. It can, however, be a challenge to make the dog not sniff the crotch when it is working - sometimes it smells of urine (dogs find that interesting); it could also smell of food or have crumbs from bread and biscuits. Clients that have suffered sexual abuse often don't want any attention in that area, and even for people that have no such history it can be quite embarrassing when the dog investigates that part of their body.



Also, with the dog's best interests in mind, it's better when the dog is saying hello from the side. If they say hello from the front, the client has "only" their head to pet, but if they are at the side the clients have almost "all" the dog available.

CHAPTER 9.

Exercises for AAI

Prepared by Line Sandstedt



In this chapter we will explain how you can teach a dog some exercises that may be applied in different animal-assisted intervention settings. . You will find videos on the e-learning platform for several of the exercises.

Following the hand/thumb

When we are working in AAI it makes it easier if we can get the dog to follow our thumb. So, if we want the dog to move further ahead, we can just guide the dog with our thumb without using any words. If you want the dog on your other side, you can easily guide the dog with your thumb (Broman, 2017).

To teach the dog this exercise you can use **shaping**. You have the dog in front of you, you present the thumb for the dog; as soon as the dog looks at the thumb/or sniffs the thumb, you “mark” the right behaviour and treat the dog. When the dog starts to understand that this has something to do with your thumb, you can start moving the thumb away from the dog. When your dog is starting to move towards the thumb, you can “mark” the behaviour. When the dog is moving freely after the thumb, you can start to lead it to a special point. You can now add a cue on the behaviour.

You can teach the dog to move from one side of you to the other side. You can teach the dog to move up on a chair or up on a sofa by following your thumb. When the dog can move freely (up and down, around objects and around you), you can start to add some disturbances. You can start with people the dog is familiar with; first, when they sit still, try to move the dog from one side of them to the other. Then you can try to do it with another person present, then with another etc. Then people can start to make some sounds, like laughing and talking. Then you can start moving the dog around in a group of people; in the beginning the people are quiet, but after a while they can start talking and laughing. And then you can try it in different environments and with people the dog does not know.

Have in mind the success rate when you add different disturbances and remember to lower your criteria if necessary.



Being sensitive to your touch

In addition to following your thumb it is also an advantage if the dog is sensitive to your touch. That means that you can easily move the dog by touching it. Many dogs do the opposite when you try to move them by pushing them away - they start pushing back. If the dog places itself too far from the client, it makes the job so much easier if you can touch the dog and the dog moves the way you push it. When you want the dog to sit in a special place, it is easy if you can just put your finger on the dog's back and the dog sits, without you having to talk to the dog. It is also good if you want the dog to lie down, you can just take the dog by the collar and show the dog that you want it to lie down.

You can teach the dog this by **shaping** the behaviour. You start by rewarding the dog for being sensitive to your touch; in the beginning you reward the dog for just "thinking" to move. And then you start asking for more and more movement before you "mark" the behaviour.

You then start to add disturbances in the same way as you did when you were training the dog to follow your thumb.

Taking treats in a nice manner

It is important that a dog participating in AAI can take treats in a nice manner. It can be very scary for people, especially those who are not used to dogs, if the dog roughly grabs the treat. Often, if a dog takes treats in a "bad" manner, people tend to throw the treats to the dog – that makes the dog even worse in taking treats.

There are different ways of teaching this to the dog:

1. Earlier we explained how you can teach your dog self-control around food. For dogs that do not take treats gently, it is important that you "mark" the right behaviour and give the dog the treat while the hand is close to the mouth, so that the dog does not get the reward (treat) by throwing themselves forward, snapping the treat.
2. You can teach the dog to wait for the treat, and the cue "gentle". Close your hand with the treat in, present it to the dog, hold the hand closed, then open it and give the dog the treat if the dog takes the treat in a polite manner; if not, close the hand again and try once more. When the dog is



gentle to you when you open the hand, say “gentle” just before you open the hand. Repeat this until the dog gets the idea.

Then you can place the treat between your fingers (thumb and index finger) and you say “gentle” to the dog; if it is not gentle, hide the treats in your fist and try again. The dog can only have the treats when it takes them gently.

3. You can also try to put the treat between your thumb and index finger and “give” the dog the whole hand, at the same time scream a little bit. Often dogs do not want to bite your fingers, so they will stop the behaviour immediately. If this works and your dog is more careful the next time, you can say “gentle” before you repeat the exercise.

Remember that it will take some time to teach the dog the cue “gently”; the dog has so much more experience of getting the food without being polite. You have to really convince the dog that the only way to get treats is to take them “gently”.

When you notice that the dog has an idea of the cue “gently”, you can start to challenge the dog a little bit. You can start giving the treats in different ways but remember to always give the dog the cue “gently” before you give it the treat. If the dog tries to snatch it, hide the treat in your hand again. After training successfully by yourself, you can start involving other people in the training. Start with people the dog knows and people that do what you tell them to do. It is important that they are not afraid of being bitten, and that they deliver the treats in the same way that you are doing. After that, you can test it on people you know are a bit afraid of the dog. When the dog is ok with that, you can take it out in different environments and after that you can use it in your work.

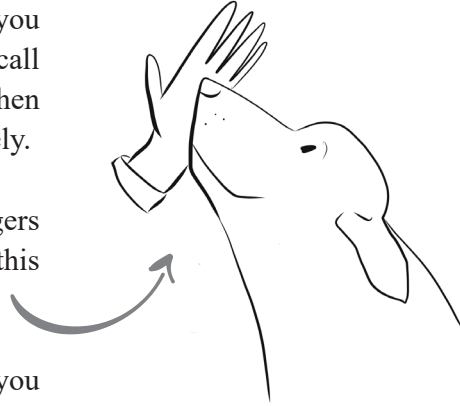
When we are working with a dog and the dog takes treats in a bad manner, we cannot let our clients give the dog treats from their hands. It is very unpleasant and can hurt when the dog really grabs the treats.

We can use cheese in a tube, or we can let the clients put a treat in the dog’s bowl. The clients can throw the treat on a target and then send the dog to the target, or the clients can give the dog a treat on a spoon.

Hand target

Teaching your dog to touch your hand with its nose is a good foundation skill for the dog and for you. The hand target is nice to use in retrieving exercises; you can make it a nice finish on your recall and you can use the hand target when you want the dog to greet people nicely.

Your hand should be held out flat, fingers together, palm facing the dog. Like this



1. When you start this training, you start with just giving the dog some treats from both hands; this makes the dog interested in your hands. Then you can show the dog the palm of your hand - most dogs are curious, so they will try to investigate your hand. When the dog touches the hand with its nose, “mark” for the right behaviour and give the dog a treat. Take the hand away, behind your back. Then present the hand one more time, “mark” and reward the dog for touching your hand and repeat.

If your dog does not try to investigate your hand, you can start by giving the dog some treats from your hands again and luring the dog a little bit by holding your hand as if you were giving it a treat. Then, when the dog comes to you to investigate what you have in your hand, you can present the palm of your hand to the dog. Instead of holding the hand still over a long time, if the dog does not touch it, you can take it away and then present it again.

When you have tried the tips above and the dog still doesn't want to touch your hand, you can smear something good in the hand, like cheese in a tube or liver pate etc.

2. When the dog is touching the palm of your hand with its nose every time you present the hand, you can start conditioning a cue. Then you start making it more difficult for the dog; hold the hand a little bit over the dog's head and say the cue; if the dog does it, “mark” and reward. If

the dog does not do it, take the hand away and try one more time. If the dog still does not do it, take a break. The next time you try again, make it a little bit easier for the dog. You can also say the cue, and instead of holding your hand still, you can move the hand further away from the dog, so the dog really has to work hard to get to touch the hand.

Then you can start to generalize the behavior, you can read more about generalization on page 100, (Training for AAI).

You can use this task in your AAI interventions, when you are doing “recall”, “retrieving”, “saying hello to people”, “passing other dogs and people” and more.

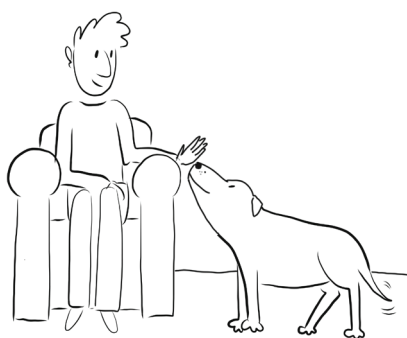


“Recall”

It is often nice to do the “hand target” on the recall exercise. It is a good idea to teach the dog to have a task when it has come to us. Dogs sometimes comes to us, and then they get the treat and run away. If they have a task to do when they come, they concentrate more, their energy level goes down and they are able to stay together with us instead of just running away again.

“Saying hello to people”

We can teach the dog to say hello to people by doing the “hand target”. If we are going to use the hand target for saying hello to people, we have to teach the dog to keep in the position “nose in the hand” until it gets a “release-cue”. For people that are a little bit afraid of dogs, or if you have a big dog, this is a very nice exercise. The clients can adjust the distance to the dog, by adjusting how far they hold the hand from their body.



“Passing other dogs and people”

We can ask the dog for a “hand target” when we are passing other people and dogs. By having a fun task to do, it will distract the dog from the things that are disturbing them.

Retrieving

We have already looked at the subsections we can split the task down into: Be able to wait, act, grab, hold, carry and deliver and wait. All of this the dog has to be able to do with different kinds of objects.

Within animal-assisted interventions, we also have to teach the dog to deliver the object in a lap, deliver the object in a box, deliver the object to different people and do the exercise in a group.

Different ways of teaching retrieving:

1. With dogs that play “tug-of-war”, I often use this method.

- a. **Playing:** Teaching the dog to play even with a disturbance such as food. I have my hand open with a treat in it when the dog is holding the toy and fighting with it. If the dog lets go of the toy, I close my hand and start all over again. If the dog lets go of the toy again when I show the hand with the treat to it, I close the hand again and take a little break. Then I make it a little bit easier for the dog. I can, for example, have my hand with the treat further away from the toy and the dog or have less attractive food. The dog is successful in the task when it can play with the toy even if I have my hand with the treats quite near.



- b. **Hand target:** Parallel to this you can do the “hand target”, first when you are sitting/standing and then when you are moving backwards. It is important that the dog deliberately pushes your hand firmly.



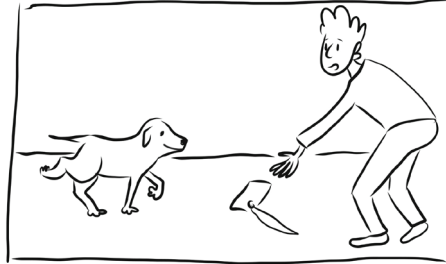
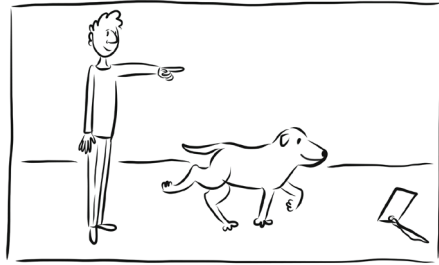
- c. **Hand target with dummy:** The next step is to have the dog in front, make the dog follow you when you go backwards, give the dog the dummy when it is close to you. As soon as the dog takes the dummy, you give the dog the “cue” and the hand target. The dog will push your hand with the dummy in its mouth, “mark” and treat the dog. If the dog is spitting the dummy out before it is doing the hand target, try once more; if the dog fails again, take a break. When you start up again lower your criteria. If the dog still can't do it, you have to go back and reinforce the previous steps.

- d. **Picking up and target with the dummy:** Now it is time to teach the dog to take the dummy up from the ground and deliver it. You sit on the ground, but with the dummy down; if the dog does not grab it, you can move it around a little bit. When the dog grabs the dummy, give the hand target cue at the same time as you present your hand. When the dog touches the palm of your hand and takes the dummy, “mark” the behaviour and reward the dog. Make sure that the dog really tries to push your hand; if not, do not reward, and try once more.



- e. **Add a cue for retrieving:** When you are sure that the dog will grab the dummy from the floor you can put it on a retrieving cue. Put the dummy on the floor, hold the dog by the collar, give the dog the retrieving cue and let go of the collar (let the dog take the dummy and deliver the dummy). After repeating this for some time, you can let go of the collar and give the dog the cue at the same time as you put the dummy on the ground. If the dog tries to grab the dummy before you give the cue, take away the dummy and try once more. Repeat this

until the you feel that the dog stops forward thinking, release the dog and give the cue. If the dog tries to grab the dummy before the cue, cheat the dog by taking the dummy away. Then repeat; if the dog fails again, give the dog a break and lower the criteria after the break. You can, for example, start holding the collar again or be quicker giving the dog the command when you put the dummy to the floor.



- f. **Keep the dummy still in the mouth (1):** In this step you have the dog standing; we are teaching the dog to keep holding the dummy when there are disturbances. You give the dog the dummy, and at the same time you open your hand with a treat; the dog should already know this from the playing game. When the dog is standing and holding the dummy still in the mouth, “mark” and reward the dog. Here the dog is allowed to spit out the dummy when you “mark” the right behaviour; the important thing is that the dog is holding the dummy until the “mark” signal comes. If the dog



is spitting out the dummy, close your hand and start all over again. If the dog starts chewing on the dummy, close your hand and take the dummy away. Keep on until the dog understands that you want it to stand still and hold the dummy still in its mouth.

- g. **Keep the dummy still in the mouth (2):** (if you want your dog to be able to sit with the dummy in its mouth). Do this while the dog is sitting as well.

- h. **Sit down with dummy:** Next step is to teach the dog to be able to sit down with the dummy in its mouth, without chewing on it or spitting it out. Have the dog standing; give the dog the dummy; at the same time that the dog grabs the dummy, you open your hand with a treat and hold it there; let the dog hold it for a little while. Then you help the dog down in a sit; if the dog is able to sit down and hold the dummy still in its mouth “mark” and reward the dog. If the dog lets go of the dummy before you “mark” the correct behaviour, close the hand and try one more time; if it still does not work, take a break and lower the criteria in the next training session.
- i. **Sit – come – sit with the dummy:** Now you can have the dog in a sit position; give the dog the dummy, encourage the dog to follow you with the dummy, and then help the dog to sit in front of you. The first time you help the dog with your hand open with a treat; when the dog is able to sit with the dummy in its mouth, then you “mark” and reward the dog. Repeat it several times.



Now the dog should be able to pick up the dummy, bring it to you and sit in front of you. It should also now deliver it to your hand when you give it the cue for the hand target. It can also be a good idea to teach the dog to let go of the dummy on a cue. We can have the dog sitting and holding the dummy; give the dog the “thank you” cue and give it a treat. Repeat several times; if the dog lets go of the dummy too fast, no rewards. Soon the dog will be able to discriminate your “thank you” cue and your hand target cue.



2. For dogs that are not playing and do not like carrying different objects in their mouth, I often shape the exercise. When shaping I reward each step/approximation that will take us closer to the goal.

- a. I start by shaping the behaviour “grabbing”. I start with an object that is nice and soft and a big bowl of treats. I sit on a chair and have the treats on the table beside me. I hold the “dummy” in my hand and in the beginning I “mark” and reward the dog for just looking at the “dummy”.
- b. Keep on this and “mark” any behaviour that the dog does regarding the “dummy”. Continue this until the dog nudges the “dummy”. It is important that this type of training continually has some progress. Do not push the dummy in the dog’s mouth; to make the dog more interested it is better to move the “dummy” away from the dog.
- c. Keep on rewarding the dog for nudging the “dummy”; when the dog nudges the “dummy” energetically, you can hold the click back for a while. By doing this we hope that the dog starts nudging the “dummy” with even more power or starts to open the mouth a little bit (frustration), “mark” and reward. Keep this up until the dog grabs the “dummy”.
- d. Make your criteria higher and higher; to start with the dog can hold the dummy for one second and after a while, it can hold the dummy for several seconds.
- e. Now you can start teaching your dog to be more conscious about what the exercise is all about. You can have the dummy in one hand and treats in the other hand. Present to the dog the open hand with treats and the dummy in the other hand. If the dog reaches for the treats, close your hand; in the beginning you “mark” and treat when the dog looks at the dummy. Then you make the criteria higher and higher, until the dog can grab and hold the dummy even if you present



the open hand with a treat. Then you can keep on training the dog to hold the dummy longer and longer with treats in your open hand. If the dog fails, close the hand and do it again.

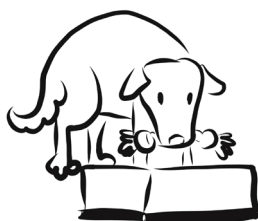
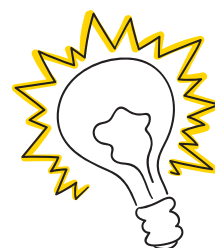
- f. When the dog can hold the dummy for some seconds while the treats are in the hand, you can start to push or pull the dummy, so that the dog has to hold the dummy a little bit firmer. If the dog lets go of the dummy, close your hand and repeat. For some dogs it is hard to hold the dummy while you push it; for these kinds of dogs you have to be very careful to give the dummy just a little tiny push the first time and then carefully make it more and more difficult.
- g. At the same time as you are training the dog to hold the dummy, you can teach the dog to grab the dummy while you are holding it closer and closer to the ground. For some dogs it is easy to grab the dummy from the ground, for others it can take some time.
- h. When the dog grabs the dummy and holds it still in its mouth, you can teach the dog to sit in front of you after getting the dummy. Some dogs will do it on their own; other dogs will just stand and hold the dummy. If your dog is standing with the dummy, you can help the dog down in a sit. Often it will be easier if you use your hand to help it sit instead of your voice. In the beginning you can use your open hand with a treat, so that you can close it if the dog lets go of the dummy or starts to chew on it.
- i. When the dog grabs the dummy as soon as it sees it, you can say the cue, then present the dummy for the dog. After some repetitions, you can hold the collar when you put down the dummy, say the cue and let go of the collar. When you have repeated this, you can hold the collar and lay down the dummy; when you can feel that the dog stops forward thinking, release the dog and give the cue. If the dog tries to grab the dummy before the cue, cheat the dog by taking the dummy away, repeat. If the dog fails again, give the dog a break and lower the criteria after the break. You can, for example, start holding the collar again or be quicker giving the dog the command when you put the dummy on the floor.

When we want to teach a dog to be a school or therapy dog we have to train them to retrieve a lot of different objects. For some dogs it can be quite difficult

to change objects to retrieve; for these dogs it is important that you take a step backwards and lower your criteria. Sometimes you have to start at the beginning again, then often you will find that you can jump some steps or that each step takes a shorter time.

When the dog knows the exercise well with you, it is time to start training the exercise with other people as well. It is good if we can teach the dog that it should deliver the dummy to whoever throws or points at the dummy. When the dog copes with other people in this task, you can start to add more disturbances like different people coming and going, working in groups, changes in the environment etc.

For therapy and school dogs it is not necessary to come and heel with the dummy. But it will be an advantage if they also can deliver the dummy in a basket or in a person's lap.



Teaching the dog to put a dummy in a basket (this can, for example, be an advantage if the client doesn't want/is not able to touch the dummy after the dog has carried it in its mouth). One way of doing this is to:

1. First you teach the dog to put its head down in the basket by having a treat in the basket. In the beginning you let the dog see that you put the treat in the basket.

If your dog thinks that it is scary to put its head down in the basket to get the treat, you can have a wider and lower basket.

2. Repeat this several times, then you can wait and see if the dog goes to check the basket without you even putting the treat in it, "mark" and reward the dog. The rewards should preferably be given to the dog in the basket. And when you see that the probability of the dog putting its head in the basket is high, you can add the cue for the behaviour.
3. If the dog does not go and investigate the basket if they don't see you putting in treats, keep on letting the dog see that you put treats in the basket. When you see that your dog puts their head in the basket every

time, you can start adding the cue. As with the previous exercises you have to take your “sign” (putting the treat in the basket) away gradually; always remember that you say the cue before you start helping the dog.

Another way of teaching the dog to put its head in the basket, is to shape the behaviour. If you shape this exercise, you start rewarding your dog just for being interested in the basket. Then you gradually shape the dog to put its head in the basket.

When the dog knows the cue for putting their head in the basket, you can put a treat in the basket; give the dog a dummy and give the dog the cue for putting its head in the basket. Then when the dog puts its head down in the basket, you give the dog the “thank you” cue, and the dog is free to eat the treat inside. Start giving the dog the dummy near the basket. The only thing the dog should do is to put its head, still holding the dummy, into the basket. After some time, you can move the dummy further and further away, so the dog has to get the dummy off the floor and then walk and put the dummy in the basket.

Then add disturbances; let the dog do the exercise with other people, have different people around, do the exercise in many different environments etc.

Teaching the dog to put a dummy in a lap (this can, for example, be an advantage if the client is not able to grab the dummy with his/her hands).

Here we can put together some exercises that the dog knows from before; retrieving, putting the head in a lap (you will find the description of how this could be trained later in this chapter) and “thank you”.

When the dog knows both how to retrieve, put its head in a lap and the “thank you” cue, you can put all three together. Give the dummy to the dog, give the dog the cue for putting their head in a lap, then, as soon as the dog puts its head in the lap, holding the dummy in its mouth, open your hand and give the dog the release cue. If the dog lets go of the dummy, close your hand and repeat the whole thing. Then, when your dog understands it, you can start putting the dummy down on the ground; give the dog the cue for picking it up, and then give the cue for “head in lap”, gradually taking away your signs (if you think that you don’t want to have them).

Putting the head in a lap

We can divide this task in two subsections:

- Putting the head in a lap
- Be able to keep it in the lap

When you are teaching this task, it can be smart to use a towel; the towel will become a sign for the dog to put its head on it. Therefore, it will be easier for the dog to understand the task when you start doing it on other people and in strange environments. The towel will also prevent the clients from getting drool on their clothes.



Here we will explain some of the methods that we can use:

1. If you have a dog that puts its head in your lap when it wants something from you, you can just capture the behaviour when it is occurring. When the dog puts its head in your lap, you can “mark” the behaviour and reward the dog. (This method you can use, if the dog shows the behaviour quite often).

When you can predict the behaviour, you put on the cue.

When you are capturing the behaviour, it can be hard to use the towel in the beginning. But when you see that the behaviour is more and more likely to happen, you can put the towel in your lap.

2. You can also teach the dog this exercise by prompting the behaviour. The first thing you do is put the towel on your lap. Then you use a treat in your hand and “lure” the dog down into your lap. “Mark” the correct behaviour and reward the dog. Repeat this several times.

Then add the cue; remember to say the cue before you add the prompt. Repeat many times. Make your prompt smaller and smaller and eventually you can take it away. In the end the dog will just react on the verbal cue and the towel.

3. You can also use a combination of the above methods. You start with luring and after some time, when you see that the dog is highly motivated, you wait and see what happens. A lot of dogs, when you put the towel down, will suddenly start to put their head on the lap; “mark” the behaviour and reward. After a while, you can start adding the cue when you can predict that the dog will put its head in the lap.
4. If you shape the behaviour, you can, for example, shape the dog to put the head on the towel first. You can have the towel on a chair or on a sofa and then “mark” and reward the dog for getting closer and closer to it. I recommend you start quite near the towel. When the dog can put its head on the towel, you can add a cue.

For therapy and school dogs it’s not very important to take away the prompt entirely. Sometimes we choose to keep the prompt to help the dog, so here you have to decide for yourself if the dog should be able to do the behaviour by cue alone or if it is ok to help the dog with the hand (and/or a towel).

When the dog can do the exercise on a cue, we start to teach the dog to hold the behaviour over some time.

Here it would be clever to use the “self-control” exercise. When the dog is displaying the correct behaviour, you can “mark” it and show the dog the palm of your hand with a treat in it (hopefully you have taught the dog that this means “you are doing the right behaviour”). When the dog takes its head away from your lap, close your hand and the dog will figure out that this is not what you want it to do. After a short while, the dog will understand that when your hand is open, you want it to keep having their head in the lap. Remember to give the dog the “release cue” before it is “allowed” to take its head away.

I often use the open hand as a sign in this exercise to tell the dog that I want it to keep up the good work. In this way I can communicate to the dog without talking to it. Often, I find that my talking to the dog disturbs my interaction with the client or the client’s interactions with the dog. In this way I simply have the hand open to tell the dog that it is doing the right behaviour and that I want it to keep doing it. When the dog knows this exercise well, I do not need the treat in the hand.

When the dog knows all this together with you, you have to teach the dog to do it with other people. Just like the hand target, start with people the dog knows and then move to unknown people. Then practice in different environments before you use it at work.

When you start doing it with other people make sure that the dog really presses its head down in the lap. It is important that the clients can feel the dog on their lap during this task.



Lying down on a rug

I often start this exercise when the puppy is quite small; it is easy to teach it to a puppy. When I sit down, I always bring the rug for the puppy to lie on. I can have the rug by my feet or on the sofa beside me. When the puppy comes and lays down on the rug, I reward the dog with attention and cuddles. When I go to visit friends, I take it with me and make it the “safe” place for the puppy. I also bring it along to puppy classes; often there is some waiting time in these classes, so I can then give the puppy the rug to lie on. By doing this I see that the puppies, after some time, are seeking the rug when they are tired and want to go to sleep. Then I put a cue on it and the puppy will be able to go there when I ask it to do so.

NB! It is important to think about the type of situations we may want to use this exercise. For a therapy or a school dog the rug is often used as a place where the dog can relax and be safe and content. Then, when teaching the dog this task, we have to think about the energy level we want the dog to have when doing this.

We can divide this task in three subsections:

- Go to the rug
- Lie down on the rug
- Stay on the rug

We have already explained different ways to teach your dog to go to the rug. (Please look at page 100)

When the dog goes willingly to the carpet, you can start to teach the dog to lie down.

1. One method of teaching your dog to lie down on a rug, is to sit close to the rug, ask the dog to go to it, “mark” and reward the dog. Then have a reward on the floor close to the rug; if the dog tries to get off the rug or take the treat, put your hand over the treat. When the dog stays on the rug, praise the dog with your voice; keep your hand on the treat. The dog will hopefully try to get the treat by offering different behaviours, and since the treat is down at the floor, it will be quite natural to try and lie down. When the dog lies down, give the dog the “release cue” and let it take the treat. Put a new treat on the floor and repeat the exercise. When you see that the dog has understood the game, you can wait longer and longer before you give the dog the “release cue”. You can also move the treat further and further away from the rug. Be aware of the energy level in the exercise, so that the dog does not get too excited. When your dog runs to the carpet, lies down and lies there until you give the “release cue”, you can put on the command.
2. If the dog knows the “lie down cue”. You can wait for your dog to go to the rug and when the dog is on the rug, you can ask it to lie down, and reward the dog for doing so. Then you keep on rewarding your dog for lying on the rug (be aware about where you reward the dog; the dog should not have to move to get the treat). When you have rewarded the dog several times for lying still, give the dog the “release cue” and throw a treat away from the rug so the dog has to move away. Repeat the procedure. After some time, you can try to not say the “lying down cue” but see if the dog is offering the behaviour to lie down anyway, then “mark” and give the dog the reward. If you see that the dog stops going to the rug on your command or that the dog is doing it very slowly, you have to go back and reward the dog for just being on the rug again. When the dog knows the game, runs to the carpet/rug and lies down, it has to wait for the “release cue”; you can then put the behaviours on a cue.
3. Start putting the exercise on variable reward schedule.



Tolerating handling

Dogs that are working in AAI should be used to and be able to tolerate different types of handling. Dogs that are very sensitive to touch should maybe not participate in AAI. When we are conducting AAI, we should really do our best to keep the dog safe from rough handling. But in some situations, things

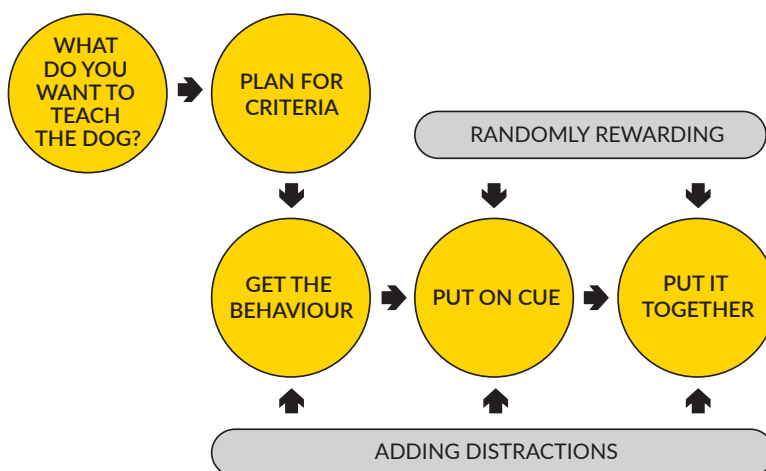
will happen and it is safer and more acceptable for the dog if they recognize this situation, and are expecting a positive outcome. Very few dogs love to be handled by a lot of different people without being prepared for the task.

When you are training this you really need to pay attention to the dog; it is important that you read the dog's emotions in the situation. When working with this we are working with something called habituation. Habituation is the process where the dog gets more and more comfortable in different situations. If the dog is feeling a bit insecure when you are touching its paws, the dog may, through habituation, get more and more relaxed in the situation. Sometimes however, when we think that we are working to get the dog more used to things, we get another process instead and the dog gets sensitized. That means that the dog will feel more and more uneasy in the situation. The only way of knowing which process you are working with, is to read the dog's emotions. If the dog gets more and more scared or is feeling more and more uneasy in the situation, you have to stop and rethink. Often when that is happening, we are rushing the process. Start the training more simply for the dog and see what happens. For dogs that are a bit sensitive, you may try the following desensitization method.

1. When you start training, you can start with just touching the dog's ears. If you know that the dog doesn't like it, just barely touch it, "mark" and reward. Repeat this until you see that the dog's expectations are changing. You can see that your dog gets positive emotions (waiting for the treat) instead of a negative emotion (wanting you to stop).
2. Make your touching a little bit firmer, "mark" and give the dog a treat. Repeat a couple of times. While you do this, pay attention to the dog and try to figure out what is happening inside its head. It is hard to say how many times you have to repeat this, but when you see that the dog's emotions have changed you can take it a little bit further.
3. Train bit by bit, put more and more pressure on the dog; when the dog is comfortable with you handling it, you can have other people do the same. Remember that when you add a disturbance (in this case a new person), you have to lower your criteria. Start with people the dog knows, then unfamiliar people. You also have to train this in different situations and different environments.

- Remember to train this for every part of the body, like the ears, teeth, paws, tail etc. You can also do this when you want your dog to get used to being petted on the head; a lot of dogs find that a little bit strange. But a lot of people do it, so it is easier to get the dog to like it. The dog you can control; some people you have no control over. This also applies to hugging - most dogs dislike being hugged, but a lot of people, especially kids, will do it. Of course we could try to raise kids not to hug a dog, but it will happen sooner or later in an unguarded moment. So better to prepare the dog.

Summary



Based on: Summary of the learning pathway (Blomster & Gunnarsson, 2012).

Summary

When you want to teach your dog a new exercise, you first have to decide what you want the dog to do. Then you have to break down the exercise in small subsections and decide what kind of training techniques you are going to use. Make a plan for criteria and try to get the behaviour you want. When you have the behaviour you want, you can choose to put on the cue and then put the behaviours together. Or you can wait until the dog knows the whole exercise before putting on the cue. After this you put the behaviour on random rewarding and start the generalization.

Good luck with your training!

Check list

Here is a check list for exercises. In this simple way, you can check if the dog is able to do the tasks in different situations. Put a mark for yes or no, then analyse and decide what you have to have focus on in training.

Check list for exercises: Yes No

Name of behaviour: _____

Home

Alone	<input type="checkbox"/> Yes	<input type="checkbox"/> No
With people present	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Outside

Other people present	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Other disturbances	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Inside but not at home (known)

Alone	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Other people present	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Other disturbances	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Inside in institutions

Alone	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Other people present	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Other disturbances	<input type="checkbox"/> Yes	<input type="checkbox"/> No

This is for extra exercises that the dog is supposed to do with other people:

Home

With another person	<input type="checkbox"/> Yes	<input type="checkbox"/> No
With another person + other people present	<input type="checkbox"/> Yes	<input type="checkbox"/> No
In a group	<input type="checkbox"/> Yes	<input type="checkbox"/> No
In a group + disturbances	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Outside

With another person	<input type="checkbox"/> Yes	<input type="checkbox"/> No
With another person + other people present	<input type="checkbox"/> Yes	<input type="checkbox"/> No
In a group	<input type="checkbox"/> Yes	<input type="checkbox"/> No
In a group + disturbances	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Inside but not at home (known)

- | | | |
|--|------------------------------|-----------------------------|
| With another person | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| With another person + other people present | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| In a group | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| In a group + disturbances | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

Inside in institutions

- | | | |
|--|------------------------------|-----------------------------|
| With another person | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| With another person + other people present | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| In a group | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| In a group + disturbances | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

The more the dog knows the exercise, the safer the dog will be.



References

- Blomster, E. & Gunnarsson, L. (2012). *Apportering til vardag og fest*. Klickerförlaget. Göteborg, Sverige.
- Broman, M. (2017). *Nytta och nöye me hunden – Din blivande terapihund*. Print Best Ltd. Viljendi, Estland.
- Hallgren, A. (2015). *Ethics and Ethology - For a Happy Dog*, Cadmos publishing limited. Richmond UK
- Killeen, P.R. (2014). Pavlov + Skinner = Premack. *International Journal of Comparative Psychology*, 27(4). <https://escholarship.org/uc/item/1v20v1dg>
- Marshall-Pescini, S., Passalacqua, C., Barnard, S., Valsecchi & Prato-Previde, E. (2009). Agility and search and rescue training differently affects pet dogs' behaviour in socio-cognitive tasks. *Behavioural Processes*, 81 (2009) 416–422
- Olsen, C., & Myren, I. K. (2015). Dyreassistert terapi for unge under opphold ved institusjon for fysisk rehabilitering. Et prosjekt på CatoSenteret. *Psyke & Logos*, 35(2), pp.7.
- Ostaszewski, P. (2000). Procesy warunkowania. [w:] J. Strelau (red.), *Psychologia. Podręcznik akademicki*, t. 2 (s. 97-116). Sopot: GWP.
- Osthaus, B., Lea, S.E.G. & Slater, A.M. (2005). Dogs (*Canis lupus familiaris*) fail to show understanding of means-end connections in a string-pulling task. *Animal Cognition*, 8(1), 37-47. pp. 416.
- Osthaus, B., Lea, S.E.G. & Slater, A.M. (2003). Training influences problem solving-abilities in dogs (*Canis lupus familiaris*), *Proceedings of animals BSAS Confrence*, pp. 103.
- Range, F., Heucke, S.L., Gruber, C., Konz, A., Huber, L. & Virány, Z. (2009). The effect of ostensive cues on dogs' performance in a manipulative social learning task. *Applied Animal Behaviour Science*, 120: 170-8. doi:10.1016/j.applanim.2009.05.012
- Range, F. & Virányi, Z. (2017). Social cognition and emotions underlying dog behaviour. In *The*

Domestic Dog: Its Evolution, Behaviour and Interactions with People, 2nd Edition (eds. Serpel, J.). University Printing House. Cambridge, UK.

Ulrich K. S. & Ingerslev, C. (2014). *Klik dig til SUCCES*. Dog training books. Holte, Denmark.

VanFleet, Risë & Faa-Thompson, T. (2017). *Animal Assisted Play Therapy*. Professional Resource Press. Sarasota, Florida, USA.

CHAPTER 10.

Relationships in animal-assisted interventions

Prepared by Line Sandstedt



In the first book *Animal Assisted Activities with Dogs* Guideline for basic requirements & knowledge (Wohlfarth & Sandstedt, 2016), we wrote a lot about the general relationship between the dog and the handler (Asp & Sandstedt, 2016). In this chapter we will focus on the different relationships in the AAI situation.

When we are working in AAI, it is important to have in mind that it is the therapist or the teacher that is the primary therapeutic or pedagogical factor; they facilitate the interaction between the dog and the client/patient/pupil.

AAI adds to the potential progress that can be made in therapy work or in education. AAT or AAE is not a substitute nor does it replace ordinary education or therapy, and a therapy/school dog will never replace the human educator or therapist (Chandler, 2017). VanFleet & Faa-Thompson (2017) state that even if animals provide motivation, reflections, connections and comfort that will help the clients towards their goals, it is not therapy as long as a therapist is not involved. It is the same situation regarding education; it is the teacher that selects the pedagogical methods and helps the children to reach their pedagogical goals, by implementing the dog in different ways.

When working in AAI it is important to focus on the human-dog relationship, not that the dog should obey us nor that the humans should be in control (VanFleet & Faa-Thompson, 2017). It is important that we teach the dog to interact with the clients/patients/pupils in a polite and respectful way, and at the same time guide the clients to treat the animals with respect and tolerance. The teacher/therapist should aim for that in all interactions; both human – human and human – dog relationships should follow the basic principles for development of friendly, empathic and healthy human relationships (VanFleet & Faa-Thompson, 2017). With this in mind, it is important to think about how we treat the dog in the therapy/education setting. The dog should be treated like a good colleague. We respect our dog's need for space, we use soft words and nice and friendly touching, and we also teach this to the clients/patients/pupils that are participating in the AAI. If the dog does not do what we expect from it, it is probably because the dog misunderstood you or misunderstood the client, or because you have not prepared the dog well enough for the task; you may have to train your dog better. In both cases it is you that is responsible, so you can be angry or disappointed at yourself, not the dog. Always talk nicely to the dog when you are working with clients; help the dog

to understand if anything goes wrong. The relationship between the dog and the therapist/teacher, the relationship between client and therapist/teacher and the relationship between client/pupil and the dog provides the context of all that happens in the therapy or in the education (VanFleet & Faa-Thompson, 2017).

Mormann et al. (2011) found that pictures of animals (as opposed to pictures of people and landmarks) touch us in a very deep and basic way, and they point to animals as a natural access point for our emotions. Bringing animals into the therapy setting will help stimulate the client's thoughts, emotions, interaction and behaviour (Oren & Parish-Plash, 2013). Paris-Plash (2008) also saw that by watching the therapist treating the dog in a nice and safe way, the children also felt safe in the situation, that enabled them to speak about things that were troubling them and difficult to talk about. Practice shows that the same happens in the classroom. A lot of practitioners have experienced that it is easier for them to work with difficult areas with the pupils if a dog is present in the room. The animal makes the situation more "normal" and supports natural and spontaneous behaviour and communication (Oren, & Parish-Plash, 2013). In education, research shows that relations are one of the most significant factors for the learning outcome (Nordbo et al. 2010). Talking to practitioners in schools, they emphasise that the relationship with the pupils is totally different if the dog is present, and they regard this as one of the most important factors in AAE. Lambert & Dean(2001) looked at research on the relationship and psychotherapy outcome. They found that the relationship between the client and the therapist was more important for the client's progress than the techniques the therapist used.

To develop a good relationship between the dog and the patient/client/pupil it is important that both the dog and the human are safe and content in the intervention. It is essential to take time to let the dog and the client get to know each other. It is important to teach the client dog language in general, so that they can be safe around dogs. In addition to that, teaching them where and how your therapy/school dog wants to be petted and what kind of language is special for it, will help the pupil to get to know this dog well. We have already talked about how important it is that the teacher/therapist treats the dog in a nice way, so that the relationship between the handler and the dog will act as a good example for the client/patient/pupil. A good relationship between the dog and the client/pupil is also related to what kind of dog we work with..

The dog needs to be social and forgiving; if the dog does not have the ability to ‘forgive’ a client or a pupil, we should not bring them to AAI. It could be that, for example, a child trips over the dog and the dog gets scared. It can be devastating for a child if the dog doesn’t forgive the unlucky incident. How easy it is to forge a good relationship between the client and the dog is also, to some extent, breed dependent. If the dog is used to training only with the teacher/therapist and normally often relates only to them, it will be hard for the dog to interact and work with others. Therapy and school dogs need to be trained to interact with others, and not just their owner; they must learn that it is safe to be with and work with all kinds of people. Therapy and school dogs should have fun and have “good” expectations of humans in general. If the dog only wants to interact with the client or the pupil if they have a treat or a toy, the dog should not work in AAI. Sometimes treats and toys get in the way of the relationship between the dog and the client/. Some dogs are so interested in food or toys that we must be very careful using it in the interventions. We, as the professionals, have to decide how much, and when, we are going to use treats and/or toys. We have to be wise in our work and use treats and toys intelligently.

Both when you are training your dog and when you are working together with clients or pupils or patients, you owe it to your dog and the clients to be 100 % fully present. If you expect your dog to be fully concentrating when you are training/working together, you also have to be present in the situation. To participate fully, your senses, attention and emotions need to be fully present (Howie, 2015). In addition to being fully present when you work together with your dog, it is also essential to be fully present together with the clients. That means that you have to concentrate about being in the here and now when you are working. When preparing for work, you should put away your phone, you should try to reset your brain, and put away all your everyday problems. Working in AAI is quite demanding, having responsibility for having the best interests of both the dog and the client in mind. As Buddha once said: “Do not dwell in the past, do not dream of the future, concentrate the mind on the present moment”. In addition to being fully present, as a therapist or a teacher you have to have the ability to split your attention. You have to be able to check out both the client and the dog; the more people that are involved the more difficult it is. To be able to see things from the client or pupil’s point of view and also considering the dog’s perspective is a valuable ability (VanFleet,

2013). It is important to stop any unwanted behaviour, both from the client and the dog. Under no circumstances is one or the other expected to have to tolerate unpleasant actions from the other (VanFleet & Faa-Thompson, 2017). Often this ability to split the attention between clients/ and the dog can be a challenge for beginners in the AAI field. Their AAI interventions become more effective, less risky and more humane when they become more experienced in reading dog language and their awareness of the significance of keeping an eye on everyone present, grows (VanFleet & Faa-Thompson, 2017).

Animals may also be included in group therapy or in classrooms. A dog can contribute positively to the group as a result of the impact that animals have on humans, such as enhancing trust, reducing stress and providing opportunities for meaningful discussions (Oren, & Parish-Plash, 2013). In the school setting, the animal can change the atmosphere and create trust between the group members, and by doing so, allow pupils to practice and develop social skills both with the animal and with other children (Harel, 2013).

Working in a group can be extra challenging, especially when the therapist or teacher are novices in their profession. It is a good idea to have an extra person with you the first few times you work with a dog and a group. Otherwise the situation sometimes becomes overwhelming to the one in charge of the group, and that is not helpful for the clients, the dog or the therapist/teacher. Working in a group is also quite challenging for the dog. It can be hard for a dog to interact with many people at the same time. For a dog participating in group therapy or a classroom it is important to be able to switch between clients. For some dogs it can be hard to be absolutely engaged in one person in the group, and then switch to another person. For another dog it can be the opposite; it may like to be engaged with all clients at the same time. If we see that this is problematic for our dog, it will be better for it to be engaged in one-to-one interventions.

The therapy/school dog can also be a support for the teacher/therapist in challenging situations. If the therapist becomes anxious or stressed, the animal can act as social support for the therapist/teacher. Often the professional is not aware that the dog is supporting them, but by doing so the therapist/teacher is more emotionally available for the client/patient/pupil (Parish-Plash, 2013).

The effects that we see on the clients/pupils also influences the handler of the dog. In their work with abused children, the therapist mentioned pets as among

their most important support system (Harper et al., 2008). It is probably the feeling of not being alone, together with the physiological changes, that helps the therapist to be able to be emotionally available and focused on the client in challenging situations (Parish-Plash, 2013).

When therapist or teachers bring the dog in therapeutic or educational settings they guide/instruct the pupil or the therapy/school dog in interactions, to reach some therapy or pedagogical goals. At the same time the handler has to keep an open eye on the situation, so that spontaneous interactions are allowed and encouraged (VanFleet & Faa-Thompson, 2017). It is important that the dog really knows what to do and what we expect it to do in every situation. Sometimes we just want the dog to be in the situation, sitting or lying together with the client/pupil and relaxing. In these situations, it can sometimes be quite stressful if the dog is looking at us and expecting a lot of action. In other situations, we want the dog to be active and engaging intensively. In these cases it is quite boring and demotivating if the dog is just lying still and doesn't want to be engaged in the activity. It is easier for the dog if we have routines and distinct cues, so that the dog doesn't misunderstand what we expect from it in different situations. This can include things such as having a special harness or special collar on the dog while working (a working sign), having a blanket for the dog where the dog can rest, having a mat on the sofa or the bed if we want the dog to lie down and relax close to the client/pupil, having a target-mat for the dog if we want the dog to put its head on someone's lap, teaching the dog to always retrieve to the person throwing the toy (so the dog doesn't get confused working with a group of people).

When we work together with our dog in therapy or education, we should have the dog off the leash as much as we can. Research shows more stress with the leash on than without the leash (Glenk et al. 2014). If we are going to have the dog on the leash it is important to be conscious about how we use this aid and we have to be extra cautious about the dog's welfare. The way we use the leash says a lot about our relationship with our dog as a colleague. The leash should support the dog, not restrict the dog. The leash should give the dog security and support, not secure the dog. The leash should protect the dog, not protect someone from the dog. The leash should also give the dog freedom, not restrain the dog (Howie, 2015).

References

- Asp, M.-L. & Sandstedt, L. (2016). *Basic of the Human-Dog Relationship. In Animal Assisted Activities with Dogs - Guideline for basic requirements & knowledge*, (eds. Wohlfarth, R. & Sandstedt, L.). Publishing House of Janusz Korczak Pedagogical University in Warsaw. Publishing House of Janusz Korczak Pedagogical University in Warsaw Erasmus Plus project.
- Chandler, C. K. (2017). *Animal-Assisted Therapy in Counseling*. Routledge, New York. pp. 411
- Glenk, L.M., Kothgassner, O.D., Stetina, B.U., Plame, R., Kepplinger, B. & Baran, H. (2014). Salivary Cortisol and behaviour in therapy dogs during animal-assisted interventions: A pilot study. *Journal of Veterinary Behaviour: Clinical Applications and Research*, 9(3): 98. DOI: 10.1016/j.jveb.2014.02.005
- Harel, O. (2013). Animal-Assisted Group Psychotherapy for Children. *In Animal-Assisted Psychotherapy*, (eds. Parish-Plash, N.). Purdue University Press, Indiana, USA. pp. 498
- Howie, A. R. (2015). *Teaming With Your Therapy Dog (New Directions in the Human-Animal Bond)*. Purdue University Press, Indiana, USA. pp.180
- Lambert, M. J. & Dean, E. B. (2001). Research Summary on the Therapeutic Relationship and Psychotherapy Outcome. *Psychotherapy Theory Research & Practice*, 38(4):357-361. DOI: 10.1037/0033-3204.38.4.357

CHAPTER 11.

How to work with dogs and clients

Prepared by Magdalena Nawarecka-Piątek



There are no strict rules in AAI that will be applicable for every client group and every kind of dog. Each intervention is different and depends on the specificity of the group and the type of intervention (is it education? Therapy or activity? Which kind of therapy?). We also need to be flexible with the dog's abilities, as every dog has some strengths and weaknesses that can be useful or that can cause some difficulties during interventions. That's why it is important for the handler to have undertaken a good level of training and education – there are no easy solutions; every session needs to be prepared individually.

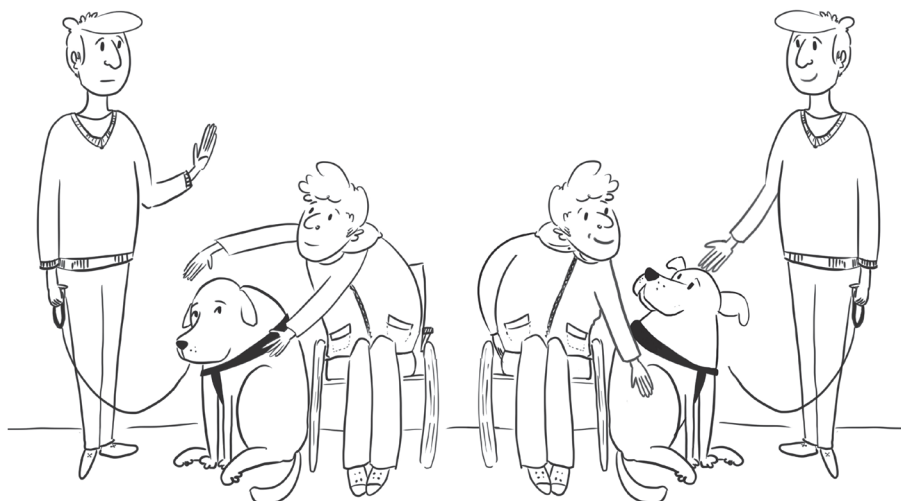
The dog's perspective

To conduct a successful intervention, you need to take care of your dog, whether you are a professional working with your own dog, or a dog handler working with the AAI team. Consider the following aspects to make it easier for your dog.

Yayaba – you are your animal's best advocate (Pet Partners Handler Guide: Pet Partners Therapy Animal Programme © 2017 by Pet Partners, p 29)

It is a term taken from the Pet Partners organization in the United States of America. What is meant is that the handler, being a person who knows the animal best, should protect its welfare. Some facility workers have unrealistic expectations about the working time for a dog and/or number of visits/participants in one group. At the beginning of your career, as you and your dog are just starting to work with AAI - it is challenging to set limitations for your dog and yourself. However, it is essential to do so right from the start. The dog is learning, gathering experiences and we want it to remember nice and pleasant experiences from sessions, not to feel tired and overworked. This may interfere with further work and training. Sometimes tough situations may arise with patients. Some of them may want to pet the dog on the head or pull on the dog's ears – it is your job to find a friendly, confident and assertive way of showing them how your dog likes to be petted. You are responsible for protecting the dog against these types of behaviours. Dogs can handle difficult situations, but if they occur frequently, the dog may start to feel stressed about the interventions. Managing situations, where patients have their own ideas about “nice petting”, may be challenging for you. Most patients just try to show the dog that they love it by petting it this way. Your communication should be clear, friendly and open, without hurting the patient's feelings. Remember to show the right way of petting; don't just stop or criticize the

patient's behaviour. You may also propose alternative activities, like playing with the dog or doing some tricks together.



Support for the dog

Not all stressful situations for the dog can be avoided. To support the dog's welfare, you should stay with your dog and support it with your presence. Again, you, as a handler, know your animal best. There are several different ways of giving support and the needs of each dog can differ. It is important that you observe your dog while training and working together and, based on that, give it the best support you can.

- **Presence** – be with your dog during the intervention. When the dog is “saying hello” to each patient, or is working (retrieving, doing tricks, etc.) with strangers, the closeness of the handler may be very supportive for the dog. It also gives you the ability to react to challenging situations and/or to provide another kind of support if needed.
- **Speech** – use your voice to reassure your dog that everything is all right. It can be a short “ok” or “good job” – in this case, the tone of your voice matters; you don't need to use a command or a rewarding word - that is reserved for the training sessions.
- **Touching** – being near your dog and touching your dog may also be supportive. Do not distract the dog from its work; that may cause more

arousal. To give support, use strong touch, to stimulate proprioception and reassure the dog that everything is ok. In many cases, touching is more calming for the owner than for the dog, so use this kind of support wisely.

- **Body posture** – Body language is the most natural and easy way for the dog to understand a situation and to communicate. Be aware of your body language. One of the ways of giving support using your body posture is to stay near to the patients and focus on them. If your body is patient-oriented, it is easier for the dog to understand the task and to avoid insecurity in the interaction. Another way of using your body is to “fence” the dog off the stressor and give it time to habituate the situation. It gives you the opportunity to change the behaviour of the patients if they are misbehaving (e.g. group of children running straight to the dog). While the dog is behind you, you can explain to the patients what they need to do to continue the session.
- **Eye contact** – sometimes the only assurance that the dog needs is a short glance at you or eye contact.
- **Command** – the confusion of the dog and its need for support may be caused by failure to understand the situation (Myren & Olsen, 2011 – not listed in the references), for example, the dog isn’t sure if the patient wants it to sit and wait or retrieve the object – that’s the perfect moment for you to help the dog with a subtle cue to avoid frustration.
- **Training/routine** – If, during the intervention, you observe that the dog has a problem with a particular patient, task or item of equipment, you may have to skip it for that moment and train before you try it in a session again.

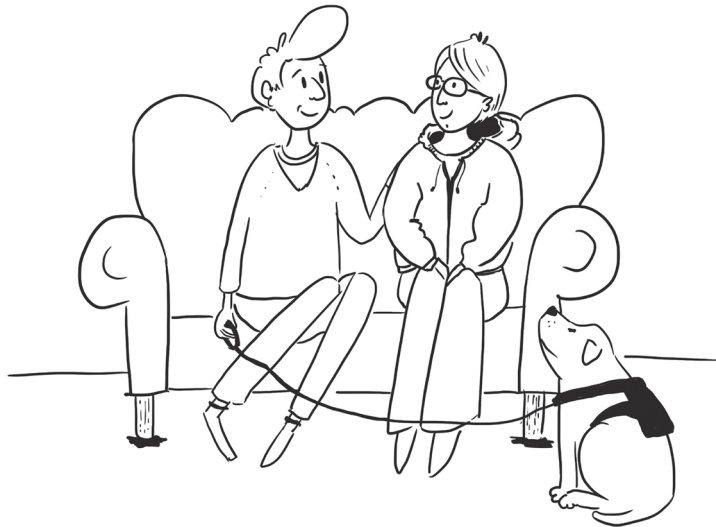
Proprioception is the sense of the relative position of one’s own parts of the body and strength of effort being employed in movement (Mosby’s Medical, Nursing & Allied Health Dictionary, Fourth Edition, Mosby-Year Book 1994, p. 1285). It is sometimes described as the “sixth sense”.

Client

Personal contact

It is essential for the client to have good contact with the handler. Remember to:

- Say hello and introduce yourself and your dog. Explain the main goal of the visit. Even if patients were prepared for the visit, they might have forgotten some information, or, because of their disability/health issues, they may need more information.
- Ask for permission to introduce your dog, especially if you are entering the patient room in a nursing home or hospital.
- Be near – a lot of patients need acceptance, kindness and physical contact (like hugging or touching hands). It is not only the dog that is working - the handler too!



- Try to remember names – use them when talking to patients. It is much easier for them to react to a direct phrase than to a general sentence. It is also a way of showing them that you care.
- Take time to listen to the patient – some of them don't have another opportunity to be heard. On the other hand, be assertive, you don't have time to listen to all their stories and thoughts. During the intervention, especially therapy or education session, it is essential to keep a balance

between exercises from your scenario and time for being with and listening to people.

Participation

Every client matters and wants to be approached individually. If you have a group, there is usually a person who is shy/withdrawn or whose disability or illness makes him/her less active than others. It is important to engage these people and have some individual tasks for them. If you know the group (after a few meetings), it is good to add some extra exercises/additions to your scenario just for that subgroup. Sometimes you may need the help of facility staff to engage these patients – so don't be afraid to ask for help and support.

Dog's focus on a client

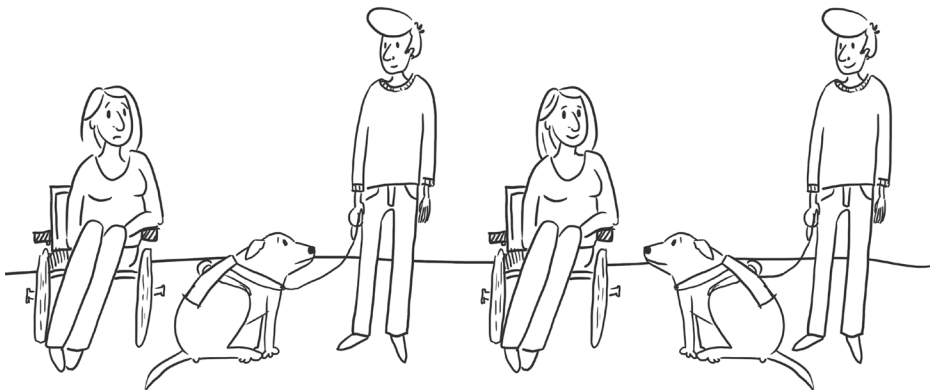
To achieve a dog's focus on a client, you have to train this ability long before the first intervention and keep up this ability even when you are working with an experienced dog. It is more natural for a dog to focus on its owner than on a stranger, because most of these people cannot communicate with the dog properly. However, if the dog learns to have positive expectations of humans during training and socialisation it will learn how to handle these situations. You can also look at the "Applying learning theory to AAI practice chapter in this book for some practical tips about training this ability.

Why is the dog's focus so important? The interaction and the dog's willingness to work with patients makes them feel special and happy about the intervention. It creates the possibility to build a relationship with the dog and benefit from it. One of the factors that makes interventions with dogs special, is the client's feeling that they are important to the dog. It can be that this is one of the important factors for the client's higher motivation in specific activities. The dog needs to be interested in the patient's movements and achievements, to emphasise the importance of these efforts. If the dog always needs the handler command to obey, the patient may feel that there is no difference in what he/she does – so the motivation will drop.

If the dog is focusing on the handler and not on the patients, the effectiveness of dog-assisted therapy is lower, or it may even have a negative effect. Because by ignoring the client, the client might feel even worse. If the only ability of the dog is to show tricks in front of the audience, it can be easily replaced by another kind of therapy.

How can we know that the dog is focusing on a client?

- It looks at the clients/patients while “saying hello” at the beginning of the intervention
- It stays with the patient for a while and waits for command/petting/playing activities
- It retrieves objects to the patients, not to the handler (without the handler’s commands)
- It listens to the commands of the clients and tries to understand and obey (if possible)



What might be the consequences for the patient of a dog’s different focus?

Dog focus on the patient	Dog focus on the handler
Possibility of an increase in self-esteem	Possibility of a lowering of self-esteem, reinforcement of the feeling that “I am not important”
Possibility of feelings of happiness of meeting with someone who cares	Possibility of a drop in motivation
Possibility of lowering the symptoms of depression	Possibility of feeling even worse
Possibility of raising the sense of own capabilities	Possibility of the sense of dependence on others

Possibility for activation/motivation to act	Possibility of passive waiting for a command/task
Possible stimulus for spontaneous behaviour	Possibility of apathy

General rules

Flexibility

During the intervention, you may work with two or more individuals. Each of them can have a different mood and set of needs that change from session to session.

The dog, even if it is well trained, is not a machine, and might make mistakes, or, because of circumstances, it may have some troubles with satisfying the handler's ideas. It is good to have some emergency or back-up scenario, with easy exercises that the dog loves, so you can use these when you see that the dog is having some trouble with understanding and fulfilling your commands. If the situation is often repeated, it means that your expectations are too high, and more training is needed. An intervention is often much more complicated for the dog than the training sessions are. That's why you should do a lot of training and have very good commands and abilities gained during practice, and then try to implement them during the intervention.

The other side of the coin is the client/patient patient or group of patients. During interventions, we work mostly with clients with special needs that have different disabilities, illness or other difficulties. That means that the patient's behaviour may vary between the sessions depending on mood, pain and health condition. There can also be some environmental issues that we can't notice or don't know about, which may have taken place before the intervention, but which can influence the intervention. Consider changing your scenario a bit if the client or group is not able to perform all of the exercises. It is important to guarantee success and good mood after AAI rather than to leave patients with a poorly done scenario and sense of failure.

Body awareness

Your body posture matters a lot. Not only as a support/distraction for the dog but also as a part of the interaction with clients. Remember not to stand with

your back to the client while you are focusing on other clients or the dog. Standing with your back to the client might not only be seen as rude but can also be a huge distraction while trying to focus on the intervention. Some clients may even feel “less valued” than others, if you have a rejective body language.

Group intervention

Bang & Heap (2009) states that a group can process thoughts and information which can open doors to help each group member gain understandings and insights they might never have been able to reach on their own. It is very important to place great emphasis on ensuring that everyone in the group feels safe. If the group members do not feel safe, the intervention will not be optimal. People tend to emphasize non-verbal language over verbal language if they feel insecure (Watzlawick et al 1967). As a therapist or a teacher or handler, you should always be aware of the role and status of individual members of the group. You have the power to let someone have a higher status in the group or to lower someone’s power in the intervention. Simply by deciding who the dog is allowed to say hello to first, you do something with the dynamic in the group. If you let the dog choose for itself, it generally tends to go to the one that is the most active. Quite often, it would be more expedient if the dog went first to the pupils or the clients who are just sitting there, hoping that the dog would choose to come to them. That is why it can be wise to point out the direction to the dog and teach the dog that there is a huge advantage to saying hello to the one that is pointed out by their handler. The sign you are using to tell the dog which client/pupil it is supposed to say hello to, has to be so subtle that neither the clients or the pupils can see what’s going on.

When working with groups, we always start the intervention by introducing both the therapist/teacher and the dog to every participant in the group. It is essential for success that you spend the same amount of time with every participant. Even the clients/pupils that do not want to say hello to the dog, deserve as much of your time as the others in the group. And of course, this does not only apply to saying hello in the beginning of the intervention, but for the rest of the intervention as well.

Research shows that the size of the group also affects the outcome of the interventions. It is important that the group is not too small, nor too big. Four to nine people is a perfect group size (Cohen-Mansfield et al., 2010). The

bigger the group is, the harder it is for you to be able to have full control, good communication and really “see” everyone. If the group is too big it can be challenging to make the clients or pupils wait for the interaction with the dog. Some clients or pupils can have diagnoses that makes it hard for them to concentrate and some can be very impatient.



Watch the video 'How to train your dog to go to the chosen participant in the group'

References

Bang, S. & Heap, K. (2009). Skjulte ressurser – Om veiledning i grupper. Gyldendal Norsk Forlag AS, Oslo, Norge.

Cohen-Mansfield, J., Thein, K., Dakheel-Ali, M. & Marx, M.S. (2010). Engaging nursing home residents with dementia in activities: The effects of modeling, presentation order, time of day, and setting characteristics. *Aging & mental health*, 14(4), 471-480. DOI: 10.1080/13607860903586102

Myren & Olsen, 2011 – need details

Watzlawick, P., Beavin, J.H., Jackson, D.D. (1967). *Pragmatics of human Communication. A study of Interactional Patterns, Pathologies and Paradoxes.* W.W. Norton & Co. New York, USA

CHAPTER 12.

**Design, implementation
and documentation of AAI**

Prepared by Dr. Christine Olsen



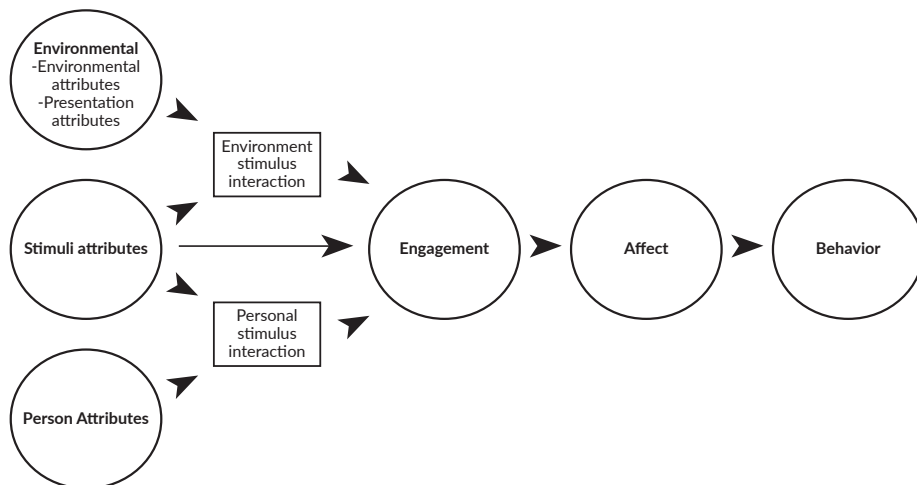
Cohen-Mansfield et al. (2009) developed a tool called the engagement model. This was originally designed for people with dementia but could very well be used for all patient groups.



In the engagement model, Cohen-Mansfield et al., found that in order to change behaviour, the client needs to get a change in affect. To get a change in affect, the client needs to be engaged in the activity provided by the intervention. To find out what will engage a client, the professional/therapist must assess the client's personal characteristics. In AAI, that would be information like whether the client even likes dogs, how old the client is, what kind of illness/problems the client has etc.? Then the professional must determine what kind of environment the intervention should be held in. Will it be in an institution, will there be other people present, other animals, inside or outside etc? Finally, you figure out what kind of characteristics the dog should have in order to make the intervention a success. Which personality should the dog have to meet the final outcome and the client's characteristics? Should it be an outgoing dog? A non-reactive dog?

As you will appreciate, there will be differences in what kind of dog one may want for different patient groups or interventions. A dog visiting an elderly home should be calm and relaxed, while a dog that is working outside with youths, could probably be more energetic. All interventions benefit from being planned to take into account the particular characteristics of the dog.

Figure 1 Engagement Model by Cohen-Mansfield et al., 2009



The client is more likely to be engaged in the intervention if the intervention is facilitated (Cohen-Mansfield et al. 2010). The dog handler should talk to the client and introduce the dog. The intervention will be more successful if the client is given information about the dog's characteristics; an introduction where they get to know the dog's name, age, breed, personality, where the dog likes to be petted, what skills the dog has, how the client can tell if the dog is a little stressed or unhappy, which word or voice the dog will respond to and in what way.

Implementation

So, when you are planning an intervention, first be sure you know what the outcome should be. Is the main goal to decrease psychiatric problems, motivate the client to engage in other activities, getting the client engaged at all, improve reading skills, etc.? Then decide if some other intervention could be as good as an animal-assisted intervention. If AAI is deemed to be the best solution, then go for it!

Consent

Make sure the client or next-of-kin agrees to be part of the AAI. Some clients will be incapable of giving informed consent for their own participation. Clients with sufficient capacity should be informed about the intervention and asked to give written consent. For clients with reduced capacity, the teacher/health personnel and/or the next-of-kin must take this decision on behalf of the client and give written consent.

Go back to the outcome - what behaviour are you looking for, and how can you bring about change?

case study 

Here is one example of how to work using the engagement model.

Joe was a young man, 23 years of age. He had dropped out of school and was diagnosed with Asperger's syndrome. He had problems in social interactions and suffered from anxiety.

Goal of the intervention

The goal of the intervention was that Joe should experience involvement that would provide security and more positive emotions (affect), which in turn would change behaviour. Previous research has shown that animals can facilitate social interactions, and it was therefore considered that working with animals could be good for Joe.

Person's attributes: Joe had a difficult time at school and had developed social anxiety disorder.

Stimulus attributes: In the intervention, Joe got to work with several dogs and especially with a big and secure eight-year-old German Shepherd Dog named Anna. German Shepherd Dogs are loyal and willing to train, and they can participate in many different activities.

Environment: Because Joe had Asperger's syndrome and social anxiety, it was decided that he should attend work rehabilitation on the days when two other boys from primary school had alternative school days with a special educator and an assistant. The work rehabilitation took place two days a week and these days were intended to be peaceful and predictable. Joe stayed with the assistant for most of the time and had main responsibility for taking care of Anna. This meant brushing, training, walking and feeding Anna.

Interaction between stimulus and environment: It was considered that Anna could work well in work rehabilitation. Anna was initially not included in the alternative school day, but the pupils knew her well, and Anna was confident of being with both the pupils and the other dogs.

Interaction between the dog and Joe: Because Anna was a steady and calm dog, Joe got the feeling that someone was watching out for him. At the same time, Anna was the one whom Joe could take responsibility for and care for. This gave Joe many opportunities for interaction and communication and also exposure to social interactions with other people.

Engagement: After only four sessions, Joe began to show interest in assisting with the school day. He showed the boys things he was good at, and he

participated actively during the shared meals. After three weeks, he asked to come three days a week instead of two.

Affect: From being embedded and anxious when someone initiated contact, Joe now showed a lot of smiles and laughter. He was more present in his attitude and in a better mood.

Behaviour: Joe's behaviour changed. He began working in a small kindergarten. He worked as an assistant two days a week, before he got a permanent job as an assistant in a half time position in the kindergarten.

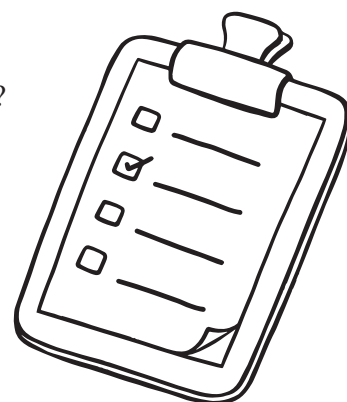
Documentation

After you have done an intervention, you must document what you have done. This is important for you to know what you have done, whether it has worked and what the client thought of it.

Make yourself a form to complete after the intervention or use an already created one.

Information relevant to document could be:

- 1) Was there a representative from the institution present?
- 2) Was the intervention a group or individual setting?
- 3) If a group setting; how many were present?
- 4) How long was the intervention?
- 5) What did you do?
- 6) How was the client's mood?
- 7) What about the client's affect?
- 8) The client's degree of engagement
- 9) How much and in what way did the client interact with the dog?
- 10) How was the dog's behaviour?
- 11) How did the dog interact with the client and you as a handler?
- 12) Did the dog show any kind of stress signals or displacement behaviour?
- 13) Did the dog show sign of happiness in the intervention?
- 14) How did you as a handler behave?
- 15) Had you prepared properly?
- 16) What should you remember for the next time?



We suggest that you try to document most of what you do. In addition to what was mentioned earlier in this chapter, documentation will be helpful for deciding

how to proceed with the therapy/education when the client/pupil has finished the AAI. In the first book 'Animal Assisted Activities with Dogs Guideline for basic requirements and knowledge' (Wohlfart & Sandstedt, 2016), you can read extensively about risk management. Institutions should include AAI in their procedures and documentation plan. If the institution has not done that, we recommend that you have a risk management plan and document any incidents. Make a standardized document where you fill in the date, institution, client, what happened and what can you do to prevent it from happening again. Sign it and give this to the contracting entity or organization. You can see an example of a form below.

Clients nr: _____

Reporting form for unexpected events or accidents

This reporting form has been prepared to provide an overview of unexpected/unfortunate situations that may arise during an animal-assisted intervention, and which the contracting entity should be informed about.

Date:

Dog handler: Name of dog:

Description of what happened:

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.....

What will be done to prevent this from happening again:

.....
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.....

The report has been read by the contracting entity.

Date and place:

Signature:

References

Cohen-Mansfield, J., Dakheel-Ali, M. & Marx, M.S. (2009). Engagement in persons with dementia: The concept and its measurement. *The American journal of geriatric psychiatry : official journal of the American Association for Geriatric Psychiatry*, 17(4), 299-307. DOI: 10.1097/JGP.0b013e31818f3a52

Cohen-Mansfield, J., Thein, K., Dakheel-Ali, M. & Marx, M.S.. (2010). Engaging nursing home residents with dementia in activities: The effects of modeling, presentation order, time of day, and setting characteristics. *Aging & mental health*, 14(4), 471-480. DOI: 10.1080/13607860903586102

Wohlfarth, R., & Sandstedt, L. (2016). Animal Assisted Activities with Dogs – Guideline for basic requirements & knowledge. Publishing House of Janusz Korczak Pedagogical University in Warsaw Erasmus Plus project.



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