



Erasmus+



Animal Assisted Activities with Dogs

Guideline for basic requirements & knowledge

Editors: Rainer Wohlfarth, Line Sandstedt



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Foreword

Prepared by Rainer Wohlfarth

Therapy Dog Training – European Standards is a partnership between professionals representing non-profit organizations, interdisciplinary associations and universities in Norway, Germany, Austria and Poland. The programme's aim was initially to establish guidelines for Dog-Assisted Therapy, but it quickly became apparent that there are considerable differences in training methods, philosophies, and how Animal-Assisted Therapy (AAT) is conducted in each country. Also standards and regulations in this wide field diverge significantly among the participating countries, not to mention Europe as a whole. Therefore, at their first meeting, the collaborating institutions decided to focus on the basic segment, Animal-Assisted Activities (AAA) or, to be precise Dog-Assisted Activities.

In the first phase of the project the group members discussed the differences, exchanging their views and experiences. Also desk research in each country involved was performed which provides an overview over the multiplicity of different structures, education and training arrangements prevailing across the countries.

In the second phase we conducted interviews with experts in the field of dog assisted activities. This interviews aimed at laying the foundation for the development of guidelines for Dog-Assisted-Activities.

In the third phase the results of the group discussions, desk research and interviews formed the basis of the methodology handbook *Animal*

Assisted Activities with Dogs. Guideline for basic requirements & knowledge. Therefore, the handbook is based upon up-to-date knowledge in the fields of AAA, human education and dog training. The project partners assume that it will serve as a foundation for AAA education and it will make achieving high-quality standardized goals much easier.

In the fourth phase participants from Poland, Norway and Germany took part in a training course for AAA. The manual was the basis for the theoretical part of the course. The learning process was supported by different didactic approaches (e.g. e-learning, videos, webinars).

The practical training for the human-dog teams resulted in an eight-day course which took place in Poland. There the realisation of AAA projects was explained and trained with practical examples.

Chapter 1

The Project

Prepared by Karolina Geletta and Wojciech Duranowski

1.1. Introduction

This guideline handbook is the product of the project “Therapy Dog Training – European Standards” financed by the European Union under the Erasmus Plus Programme. This book is a set of training materials that aims to collect evidence-based documents providing up-to-date knowledge concerning rules for conducting animal-assisted activities with dogs. The handbook focuses on issues dealing with the methodology of choosing and training dogs to become visiting dogs. Animal-assisted activities (AAA) is a quickly developing area – so the body of knowledge is not sufficiently structured and there are major differences in how EU countries provide services to AAA clients. Because the EU is also a common market of services, there is a need to create common minimum standards of animal-assisted activities. Standardization of different social approaches (for instance: social work, pedagogy) is the safeguard for high quality for the final service for the customer. In AAA the importance of high quality is especially important because AAA are generally facilitated by individuals who do not have a professional health, education or human service degree. In addition the weakest social groups are often the beneficiaries of the services provided

by the dog-human team. Oncology patients, the disabled and terminally-ill, juvenile justice offenders, prisoners, victims of the domestic violence – these fragile social groups often find their way or find comfort for their pain through dealing with animals (in this case dogs).

Animal-assisted activities are mostly provided by so-called non-profit organizations, and it is one of their main roles to work out common fundamentals of safe and helpful activities. The task of the handbook and the project is definitely not an easy one – as the European Union is a community of 28 countries with often completely different systems of social care, social justice and medical treatment. Therefore, the task of gathering this body of knowledge in this field from sample countries (Germany, Norway, Poland) is important and pioneering work, which can be a foundation for the future standardization within the European Union. Level of development of AAA through Europe is different and chosen partners are typical for their respective regions. AAA with dogs is becoming more and more popular in Europe; however, it is worth mentioning that different kinds of activities including, for example, horses, lamas, cats and other domestic animals are now being tested. It is very important that the knowledge on AAA is of high quality, in order not only to guarantee security to clients but also to provide the most appropriate activity for them. Guidelines which clearly organize knowledge chapter by chapter is essential.

The practice of animal-assisted activities needs knowledge of different fields, including psychology, pedagogy, medical studies, social work and anthrozoology. However, as with most social innovations (which we consider animal-assisted activities to be), the body of knowledge comes directly from practitioners, i.e. non-profit organizations which undertook the task of promotion and development of animal-assisted activities in their respective countries. Therefore, it is not only science but also practice, which will bring documented knowledge to our handbook, as we believe that hands-on empirical experience is equally important in the process of defining and structuring knowledge. Combining scientific knowledge with empirical experience for the sake of guidelines will be a significant step towards the creation of a clear quality profile. Currently, due to lack of clear norms, the market for AAA is often endangered by well-meaning people with insufficient skills and knowledge, who are willing to provide services without

any basic knowledge concerning animal assisted activities and work with disadvantaged groups. It has not been possible control handler's or dog's qualifications.

This handbook will attend to structure knowledge on the most important aspects of AAA. During the first part of the project, partners from Poland, Germany and Norway discussed the most important elements to be included in this handbook. The structure of the handbook is briefly described below. The handbook is divided into 12 chapters which thoroughly discuss different aspects of AAA.

This handbook provides an overview of fundamentals of AAA with regard to the historical context and its rapid development in the European Union. Basic definitions are supplemented with practical knowledge achieved from working in dog-human teams. First chapter provides detailed information about the project and objectives of introduction of standards. In the next chapter "Participating countries", we collected information about common elements of AAA in the three participating countries. Following chapters discuss consequently different aspects connected to AAA: basics of Animal-Assisted Activities (chapter 3), basics of the Human-Dog Relationship (chapter 4), how to choose dog for AAA (chapter 5), early training and socialization (chapter 6), communication between humans and dogs (chapter 7), stress, causes, signs and consequences (chapter 8), learning theory (chapter 9), training/education of the dog (chapter 10), animal welfare (chapter 11) and risk management (chapter 12). Composition of chapters aims at providing learners with the most up-to-date knowledge concerning the basis of Animal-Assisted Activities, Basic Veterinarian and Ethological Knowledge and Communication/Learning aspects.

The guidelines how working with dogs which is described in the handbook is important for the appropriate activity. The science of working with dogs is wide but we should be aware that not all methods of dog training are appropriate for AAA. This is why, dog handlers should be very cautious when choosing the method and they should also follow evidence-based approach, not looking for short-time fads, but rather looking towards a constituted body of knowledge. This handbook presents the theories which form fundamental knowledge of the future dog handler. The handler should know that using certain methods can be dangerous for the dog and

cause unexpected and inappropriate effects. For example, using punishment when working with a dog can make the dog avoid the dog handler and, in the long run, it can develop depression and withdrawal from work with the handler. Therefore, the dog handler should be able to assess and evaluate pros and cons of each activity to be made. Activities can affect not only a client but also the animal and other stakeholders (for example, the family of the AAA beneficiaries).

We believe that the handbook of European Standards in AAA will be a remarkable further step towards quality of animal-assisted activities in the European Union.

1.2. Objectives and context of introducing standards

The concept and model of guidelines in AAA were developed jointly by the organizations which participated in the project. The distinguishing feature of the proposed standards model is that it is a unique attempt at standardization in the work of human-dog teams across various EU countries.

While working with a model of standardization, the main aim was to improve the quality of AAA through better education, counselling and setting minimum requirements concerning different spheres of AAA. The standardization of the work of human-dog teams and dog training seems to be essential for both the efficacy and the safety of the activities. AAA, which is still perceived by many as a “hobby”, would benefit from a legal framework which would set minimum quality standards. Certified people providing AAA follow minimum standards will earn greater trust among different professional groups: ranging from medical doctors, teachers and rehabilitation practitioners to social workers. Presently, in many EU countries, there are various obstacles for the practice of animal-assisted activities. The people in charge are often cautious about allowing a dog handler with a dog to enter the institution to conduct activities. Minimum quality standards will remedy this situation and promote animal-assisted activities.

In our AAA handbook on, the guideline consists of the following main areas:

1. Knowledge and understanding – the basis of animal-assisted activities
2. Knowledge and understanding – basic veterinarian and ethological knowledge
3. Communication and learning

Standardization of services is defined by J. Boczon as a “process of gradual defining and answering the question: what and at which quantity/quality can we propose as a standardized service for particular groups of beneficiaries. It is also about how the provided service should address their needs and meet the criteria of rational satisfaction of consumer needs”¹. The handbook does not use a narrow definition of standards, as going too deep into limitations could hamper the development of animal-assisted activities. Exaggerated standardization could result in standards which are very difficult to meet. This would not improve or organize the market but, instead, it would hamper the development of services in AAA.

Our approach to standards follows the six functions of standards formulated by Barbara Szatur Jaworska²:

- Standards can help increase the quality of service and promote it in the society;
- Through standards we provide evaluation of services, i.e. evaluation of planned and provided service;
- Standards inform new service providers about how to plan their services and what are the crucial elements of service;
- Standards help the clients to resolve issues concerning correctness and ethical conduct of service provider;
- Standards increase the credibility of the community of practitioners and improve the trust in their work among clients and other stakeholders interested in their service;
- Standards secure personal rights of other persons involved in the service, apart from clients and service providers;

¹ J. Boczon, “Poradnik Standaryzacji Usług Społecznych”, Warszawa 2004.

² Krzysztof Cibor, “Tworzymy standardy usług opiekuńczych – po co, jak, z kim?”, FISE, Fundacja Inicjatyw Społeczno-Ekonomicznych, Warszawa 2015, p. 10.

The guidelines for AAA is a unique work on standardization of services in animal-assisted activities. The main beneficiaries of this work will be clients and the general public who are interested in obtaining safe and standardized services. Our work, thanks to Erasmus Plus project, will make necessary knowledge widely accessible and it will promote further development of animal assisted activities.

1.3. Users and recipients of standards

A person who wants to work as a visiting dog handler will have clear guidelines regarding the knowledge and skills that should be acquired as well as recommended courses that should be completed. This will enable these persons to make a conscious decision about whether they want to join a human-dog visiting team – being aware of the course criteria and quality requirements makes it easier to come to a good decision.

Coaches at training centres for human-dog teams will have access to the course and directives regarding training visiting dog teams, which are required by the EU. That will make their training courses consistent with the uniform programme and will result in common standards for European countries.

People joining animal-assisted activities are often people who require specialist help, they also need a chance to verify the knowledge and preparation of the person who handles the dog. As currently there are no European standards, there is a high risk for duplicating bad habits among handlers.

Thanks to the handbook the handler who work in AAA will be given clear requirements concerning conditions for animal welfare.

Institutions which train visiting dogs will have more information about minimum requirements for providing the service. It will be easier to check if the service is provided according to standards and if the therapeutic team has sufficient qualifications.

Finally, the general public will benefit and will be able to recognize AAA as a new emerging profession, not as a hobby which cannot be defined or measured. Various stakeholders, not only clients or providers, will be safer

thanks to standardization. This pioneering work which may also encourage other AAA handlers (for example: those working with cats, ponies, llamas or other domestic animals) to develop their own standardization.

1.4. Standards of practice

Definitions

The following definitions were established by the IAHAIO (International Association of Human Animal Interaction Organizations).

Animal Assisted Intervention (AAI): An Animal Assisted Intervention is a goal oriented intervention that intentionally includes or incorporates animals in health, education and human service (e.g., social work) for the purpose of therapeutic gains in humans. Animal assisted interventions incorporate human-animal teams in formal human service such as Animal Assisted Therapy (AAT) or Animal Assisted Education (AAE).

- **Animal Assisted Therapy (AAT):** Animal Assisted Therapy is 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 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 client.
- **Animal Assisted Education (or Animal Assisted Pedagogy):** Animal Assisted Education (AAE) is a goal oriented, planned and structured intervention directed and/or delivered by educational and related service professional. AAE is conducted by qualified (with degree) general and special education teacher. Regular education teachers who conduct AAE must have knowledge of the animals involved. An example of AAE delivered by a regular education teacher is an educational visit that promotes responsible pet ownership. AAE, when done by special (remedial) education teachers is also considered therapeutic and a goal

oriented intervention. The focus of the activities is on academic goals, pro-social skills and cognitive functioning. The student's progress is measured and documented. An example of AAE delivered by a special education teacher is a dog-assisted reading program.

Animal Assisted Activity (AAA): AAA are informal interactions/visitations often conducted on a volunteer basis by the human-animal team for motivational, educational and recreational purposes. There are no treatment goals for the interactions. AAAs are generally facilitated by individuals who do not have a health, education or human service degree. However human-animal teams have received at least introductory training, preparation and assessment to participate in informal visitations. Human-animal teams who provide AAA may also work formally and directly with a healthcare, educator and/or human service provider on specific documentable goals. In this case they are participating in AAT or AAE that is conducted by a specialist in his/her profession. Examples of AAA include animal assisted crisis response that focuses on providing comfort and support for trauma, crisis and disaster survivors, and visiting companion animals for 'meet and greet' activities with residents in nursing homes.



Chapter 2

Participating countries

Prepared by Magdalena Nawarecka-Piątek

Animal-Assisted Interventions (AAI) is a wide concept that encompasses Animal-Assisted Activity (AAA), as well as Animal-Assisted Education (AAE) and Animal-Assisted Therapy (AAT). Given the wide scope of the activities covered by the concept, there are various ways of conducting activities as well as engaging and preparing animals. The following paper synthesises legal regulations, work standards, practices and methods of preparing animals to participate in AAA in Poland, Germany and Norway.

2.1. Applications of AAA

In Poland, as well as in Germany and in Norway, dog-assisted activities are organised for disabled and non-disabled people of every age group: children, teenagers, adults and the elderly. In the case of Norway, the education activities for children are the most popular, but in recent years there is a growing interest in organising dog visits for elderly and lonely people. In Germany, a lot of visiting dog activities are designed for people with physical, mental and social disorders and for elderly people. In Poland,

the majority of such activities is dedicated to children's education, as well as to children in nursing homes, orphanages, special needs/integrated schools and hospitals (especially oncology wards). Visiting dog support for the elderly is much less developed.

2.2. Legal aspects of AAA in Norway, Germany and Poland

None of the three countries have state regulations pertaining to AAA. The people involved with this activity rely on international or internal standards that provide guidelines but which are not regulations that can be enforced. AAAs, however, are covered by a wider scope of animal welfare regulations, veterinary and sanitary regulations, as well as the classification of occupations.

In Norway there are guidelines of AAI that involves dogs, these guidelines were elaborated in cooperation with the Directory of Health, Norwegian Centre of Anthrozoology, the Norwegian Kennel Club and the Norwegian Food Safety Authority. In addition people who are involved with animal assisted activities have to follow the rules for animal welfare and dog owner responsibilities.

In Germany, due to the lack of an international institution responsible for AAA, the majority of organisations apply ESAAT and Pet Partners standards. According to the guidelines provided by the European Society for Animal-Assisted Therapy (ESAAT), a dog handler – if providing AAT or AAE – should always work in a therapeutic team. The organisation provides accreditation for units offering visiting dogs. The Animal Welfare Act (TierSchG) states that in order to train dogs commercially, proper permission must be obtained. These regulations, however, only provide a framework, differ depending on a given “Bundesland” and are simply guidelines and not clear regulations for AAA dog handlers.

In Poland, just as in Germany, the guidelines of the Pet Partners serve as the point of reference. The occupation of “kynotherapist” (visiting dog specialist) is in Poland present on the list of occupations, but it is not regulated, i.e. the access to this occupation is free to everyone.

It may be concluded that the main difference between the three countries discussed in this paper is that the focus of Poland and Germany is on the safety of the environment and order regulations, Norway, on the other hand, puts emphasis on the general animal welfare.

2.3. Work standards for dogs in AAA

The work standards for dogs in AAA cover both matters associated with organisation and handling of the setting as well as methods of preparing the dog for work.

In Norway, significant emphasis is placed on the rules of cooperation with institutions in which activities carried out: starting from hygiene and safety and ending with standards implemented in the event of unforeseen accidents (protocols prepared for this occasion). The activities may take place once the staff of a given institution is properly trained in this regard. Particular focus is put on allergens spreading, limiting rooms in which the dog may stay, cleaning after the dog and other sanitary regulations. Sometimes an institution decides to make a dog its resident, but this kind of solution is not advised: visiting dogs are more common. The clients/patients of the institution must each time be informed about the purpose of the visiting dog.

As for the animal itself, it is recommended to choose an adult dog with a stable character that (just as in the case of the other countries) has to be under the care of a veterinarian. The age of the dog is an individual matter: the most important is that it has to be fully matured. The dogs must pass ability tests that also check if the dog is happy with this kind of activities. Much emphasis is placed on satisfying the dog's needs and reading the signs it gives. The Norwegian Kennel Club set out guidelines on dog keeping based on legal regulations and dogs' needs.

In Germany, the major problem is lack of interdisciplinary understanding of AAA and absence of scientific tests pertaining to the effectiveness of such actions, even though, according to the statistics, 59% of organizations evaluate the effects of animal interactions and another 21% do so from time

to time. 80% of institutions providing AAA services enforce their internal work standards. Usually, dogs work 1-3 times a week and 1-3 hours a day.

In Poland, similarly to Norway, a detailed description of the occupation of visiting dog specialist includes information on the necessity of cooperation with specialists (a doctor, a physiotherapist, teacher, psychologist, etc.) during group and individual activities. The handler is responsible for preparation (including training) of the dog to participate in the activities, the goal of which is to establish good contact between the dog and the participant(s). The dog is referred to as a “study aid” to be used in work with people with various degrees and types of disabilities, as well as with sick, lonely and elderly persons. According to the requirements, the dog has to be socialized, predictable and obedient. In the surveyed organizations, dogs work around 4-5 hours a week and a maximum of 2 hours a day. There are no statistics that would help us determine to what extent the AAAs are evaluated and effective (according to the said evaluations). As for the choice of a dog, it seems that handlers decide to work with puppies (as opposed to Norway)– the data on this subject, however, are not available.

In general, in all the three countries, the standards differ depending on the institution responsible for organising the activities.

2.4. Dog abilities

The basic features that should characterize a dog involved with AAA are similar in all the three countries. There is consensus on the fact that the dog should have adequate predisposition for this kind of work, which is reflected in the dog’s (directly and indirectly defined) sociability, extraversion and self-confidence. The differences, however, may be observed, when it comes to the expectations towards the training level.

In Norway, the scope of the dog’s training often depends on whether the dog is trained as a therapy/school dog or as a visiting dog. It is usually agreed that a visiting dog should learn the necessary basic obedience commands (e.g. walking on a leash, laying down and staying, staying in a sitting position, taking treats gently and basic tricks), how to lay it’s head on a person’s

knees and fetch, as well as be properly socialised, including exhibiting proper behaviour in the presence of such equipment as wheelchairs etc.

In Germany, 47% of institutions involved with AAA organise practical training sessions for dogs. The rest tend to rely more on the observation of a dog. During training sessions and observations, the focus is put mainly on the dog's socialisation level and self-confidence in various environments, contact with other dogs, basic obedience, reinforcement of behaviours by means of a treat/clicker, ability to fetch, willingness to cooperate.

In Poland, as much as 82% of the surveyed organizations stated that understanding of basic obedience commands is the most important ability of a dog. Additionally, particular attention is paid to: willingness to enter into interactions with humans, self-confidence in various environments, knowledge of tricks (much less often mentioned by German organizations), lack of aggression towards humans and animals, right response to noise and pressure. 47% of the surveyed organisations conduct regular dog training sessions. During the training sessions the biggest emphasis is put on socialisation and learning obedience-related commands.

As can be seen, even though the focus is on different aspects, in all the three countries obedience, socialisation and willingness to cooperate with a human, which enables to teach the dog additional commands, are listed as the most important elements in AAA dog training.

2.5. Dog examination

As has been already mentioned, given the lack of uniform regulations and standards, none of the three countries has an official examination system for dogs involved with AAA. In Norway, Germany and Poland, some organisations do not even use dog examinations and those who do so, conduct the examinations in a non-uniform manner. Moreover, there is no clear indication of the age of the dog to be admitted to examination. In Norway and Germany, the usual age of admission is two years, which is usually associated with the dog's physical and emotional maturity. One of the most important elements of the examination is the assessment of

the cooperation between the dog and its guide. Regardless of the country, some organizations put emphasis on predisposition tests, others – on both the dog's character and its acquired skills.

In Norway, the examination includes a number of aspects. The most important thing is the dog's character and the dog-owner relationship. The dog has to be balanced, social, not aggressive, should not demonstrate resource guarding and it has to be able to inhibit its impulses. The dog has to be well socialized, and has to cope well with the environment including slippery floors, smells etc. Tolerance for hugging, staying close to unfamiliar humans and willingness to play are also considered important. It is also important in what manner the dog takes treats, how it reacts to noisy people, sudden high noises and surprising events. The cooperation with their handler, willingness to cooperate and skills learning are also important. In this respect, the theoretical knowledge of the handler is checked.

In Germany, 20% of organisations apply dog character examinations. 35% of them examine dog-handler teams. Usually, the tests are carried out inside the institution organizing AAA. The most important aspect assessed during the examination is the relation between the dog and the handler. In addition, the focus is on the dog's reaction to strangers, general obedience, the level of socialisation, friendliness, reaction to touching, socialisation with other dogs, reactions to various stimuli (noises, smells, etc.), physical shape and the tolerance level for frustration/irritation. Moreover, the examination takes into account the dog's temperament features, such as self-confidence, ability to learn, openness and other important traits, e.g. feeding behaviours, the level of control of hunting and territorial instincts. The features that disqualify a dog include: aggressiveness, fearfulness, excessive resource guarding, excessive barking, hyperactivity, nervousness and shyness. Finally, the test is failed if the handler applies negative pressure or uses aversive tools.

In Poland, preliminary tests for dogs to be used in AAA take various forms and are conducted in 73% of the surveyed organisations. 18% of the organisations use free observation as a dog assessment tool. In other organisations passing a basic obedience training course is the prerequisite for dog admission. 53% of the surveyed organisations arrange examinations or require passing an examination organised by an external unit. The goal

of the examinations is to assess the cooperation between the dog and the handler, as well as the dog's psychological predisposition, socialisation, level of skills and aggressive reactions that preclude the dog's admission. Some organisations require the examination to be retaken every year.

In all the three countries the decisive factor determining the admission of a dog to work in AAA is, firstly, the type of setting in which the dog would participate and, secondly, decision of the persons responsible for dog admission in a given organisation. All the requirements for dogs and their handlers should be seen only as internal standards applied by institutions providing AAA-oriented services. There are no standardised guidelines and the only regulations that form a legal framework for visiting dog activities are acts and laws laying down general rules on animal handling, that is, on the one hand order regulations (keeping a dog under control, cleaning after a dog and – in Norway – basic training) and animal welfare regulations on the other (ensuring the dog's well-being, mandatory vaccinations, etc.).



Chapter 3

Basics of Animal-Assisted Activities

Prepared by Rainer Wohlfarth and Bettina Mutschler

3.1. Clarifying your own ideas

Just imagine calmly what people you and your animal would like to work together with. Can you imagine working with an elderly person, with someone who is confused or seriously ill and lies in bed? Or do you prefer working with children or disabled persons? What group of patients/clients suits your animal?

You should not allow retirement homes, hospitals and helpers to overtax you as a team involved in animal-assisted activities (e.g. to bear responsibility for the residents alone etc.). You should also know your own limits (e.g. time frames) and be careful not to overburden yourself.

Health of the animal – Observing hygienic standards

- Regular veterinarian check is necessary, so that the animal is healthy, has no pain and poses no potential hazard.
- The dog
- Regular immunizations according to the current location-based immunization schedule (for dogs mainly rabies, distemper, hepatitis,

leptospirosis, parvovirus and kennel cough) to eliminate the risk of disease transmission (Zoonoses).

- Regular prophylactic treatment against ectoparasites such as ticks and fleas (for example, application of spot-on products every 4 weeks) as well as
- Regular deworming, quarterly to semi-annually depending on the behaviour of the dog, are equally important for both dog and human.

The animal liability insurance should cover activities in animal-assisted activities.

3.2. Preparations for AAA

3.2.1. Establishing contact with the institution

- Phone contact to describe the project
- Query about the concerns and the possibilities to realize the project
- It should also be clarified beforehand whether any reservations towards the animal exist among the staff, the residents or their relatives.

3.2.2. Exploring facility

After the phone contact a personal visit usually takes place – first without an animal – to get used to the facility, the staff and the residents or potential clients.

The facility should also meet some basic requirements for an animal-assisted activities. It should:

- have a qualified care program,
- be open to new ideas, support and accept animal-assisted activities as an important measure,
- ensure that the framework is appropriately arranged,
- include animal-supported activities into the hazard analysis,

- include animal-supported activities into the hygiene plan,
- render assistance in choosing residents, for example, according to their biography or individual needs and interests,
- provide the team of animal-supported activities with a professional partner for experience and knowledge exchange

First, it is necessary to clarify with all the participants (e.g. managers, doctors, caring staff, social workers, home supervisors etc.), whether the facility qualifies for AAA (see above).

In the introductory talk you should particularly mention the positive effects of AAA, but do not hesitate to bring problematic aspects. The following arguments can be used against AAA:

- Possible overtaking both the residents/patients/clients and the animal itself.
- Allergic reactions of people/people that are scared of dogs (the staff as well!)
- Hygienic requirements
- Insufficient personnel (e.g. no time for preparatory and follow-up steps)
- Insufficient time and space.

The use of animals should be very well planned and integrated into the overall therapeutic context. Individual preferences and refusal from both the residents/patients/clients and the caring staff should be taken into account.

The activities / the project (goals, main tasks, costs and resources etc.) framework should be discussed clearly and unambiguously. It should be clear to all the participants what the activities involves, what they do and how the activities should carried out.

It should be discussed in detail which of the patients/residents/clients are suitable for AAA. The following should be clarified:

- Who is my contact person? It is useful to have a fixed contact person, like someone responsible for the animals, to coordinate the project.
- Are there people in the facility who are allergic to animal hair or are afraid of dogs?
- Are there other animals in the establishment/home/hospital?

- Is a single visit to a bedridden person, to a group in a shared room or a walk with someone in a wheelchair desirable?
 - Is a fixed rhythm important or can the team freely arrange their visits within a certain time frame?
 - Should the activity be coordinated with a hygiene specialist?
 - Should the activity be included into the hazard analysis?
 - Should an emergency plan be prepared?
 - Is it allowed to take the animal into the bed, have the animal to sit on the wheelchair or on the table?
- Do not promise anything that you cannot fulfill.

3.2.3. Preparatory training

Before the start of the animal-assisted activity, the staff should be comprehensively informed about it. This includes information about the concept and the theory as well as the goal of the animal-assisted activities and also a short introduction into the animal-human relations and its specific gerontological and psychological aspects. It is useful to distribute some information materials.

The staff could be informed through lectures, articles in the newsletter and briefings. It is useful if the training is supported by the person responsible for the animals.

Reservations concerning hygiene should be dealt with and the animal should be included in the hygiene plan. The staff should get an opportunity to speak about their reservations concerning possible threats caused by the animal and the animal itself should be included in a hazard analysis.

3.2.4. General information for residents/patients/clients

General information for all stakeholders: in addition to the staff, the residents/clients/patients and their relatives should be thoroughly informed about animal-assisted activities. It can be done, for example, at information

evenings or through an article in a newspaper read at hospital/home or at parents' meetings.

There should be a letter of consent for people who are being cared for and for children.

3.2.5. Coordination and definition of the procedure

Clients like it if AAA is organized on a regular basis, e.g. once a week at the same time. The length of AAA should be limited even though our animal is not exhausted. Most of the European organizations state, that the maximum length should be one hour. Animal-assisted activities are optimal in individual contact, i.e. with a single resident/patient/client. If AAAs are conducted in a small group of patients/clients, the number of participants should not be many big. We feel a group of 5 to 7 persons is the optimum.

3.2.6. Anamnesis for the persons to be cared for

In this case you have the opportunity to ask about the life situation of the person with whom you are going to interact. For the interaction to be optimal you have to take an interest in the person you are going to visit with your dog. You need flexibility, sensibility and good observation skills. It should, on the one hand, comply with the needs of the residents/patients/clients. On the other hand, the actual goals of the activities should be maintained. The goals of the animal-assisted activities should be determined clearly. For further success control, which is essential, you should also determine some observation criteria with relation to behaviour, endurance, expression of feelings or patients/clients' ability to concentrate. The role of the animal during the activity should be understood beforehand.

3.2.7. Specific information for the residents/patients/clients

If you have decided to use an animal in a group activity (e.g. memory group), you have to inform participants about it. First it takes place without an animal. In order to inform the group about the animal, you can take some photos with you. You have to tell the participants how to behave with an animal. You will find guidelines for behaviour with a dog in the appendix.

3.2.8. Introductory visit of the animal

Let your animal get familiar with the facility where AAAs are to take place, so that it has the opportunity to explore the strange surrounding and get to know the people. The animal should gradually get familiar with the sound and smells of the facility through several visits there

It can be useful to let the dog relax in a group gathering, i.e. put it on it's blanket on the floor at the room.

3.2.9. Location selection

The location should be selected so that the animal-assisted activities can take place without any interference. It could be either the resident's room or some calm and friendly room which is not too small. A shared room or a garden could be a possible alternative. The floor of the room should not be too slippery so that the residents/patients/clients can really integrate themselves into the activities without too large a risk of an injury for the animal. For further information see the chapter: Risk management.

3.2.10. Prepare yourself for a single person or a group

Refresh in your memory or read once again the names and biographies, plan the procedure: which activity could be offered today? What can the dog do?

Fill your bag with necessary things like a notebook where you can register your activities. It is importance to respect data privacy.

Pack objects for the dog: its “working sign”/uniform (harness, neckerchief etc.), chest harness/collar, leash, dog blanket, towel to clean the paws, water bowl, bags for a possible mishap, treats and toys, possibly a soft grooming brush, a clothes brush and the materials you need for the activities. You could possibly include a coloured neckerchief for a black dog as an attractive eye-catcher. You should also have some disinfectant both for the participant’s hands and for any surface the dog touches, like a table.

Walk your dog shortly before the visit. Your dog should not be hungry or thirsty before the visit. Make sure that your dog is clean and smells good. If it does not you have to wash it. It is also a good idea to brush your dog thoroughly before entering the premises; (*see illustration 1: Pack your bag*).

Illustration 1: Pack your bag



3.3. Conduction of AAA

The dogs should be kept on a leash while walking through the establishment. Take time for AAA. It is good to arrive earlier and have time for yourself and your dog before and after the activities. Pay attention to whether your animal is willing to contact other people or if it is not. Your dog should enjoy interaction with the clients. Threatening or forcing your dog to interact with clients should not happen at all. If the dog disapproves of it and does not like the situation, you have to take it out of the AAA session.

Try to eliminate disruptive factors: perhaps switch off the radio and TV, take away other animals and food leftovers.

Make sure that there are no pills or food on the floor before letting your dog in the client's room.

Place the chairs and wheelchairs in a circle in such a way that the animal and its handler can move freely.

Guide the residents/patients/clients to their seats and ask the staff for assistance, if needed.

For the dog: lay the dog's blanket in a quiet spot, so that the dog can rest during the AAA sessions. Don't forget to put a water bowl in the corner of the room.

Limit your activity to some fixed time (e.g. half an hour), so that you overtax neither the residents/patients/clients nor yourself and your animal.

Do not run one AAA session after another, give your animal enough recreation time and create a quiet zone for the animal.

Promise to come again only if you are sure you will really make it.

3.3.1. Code of conduct for a successful AAA

- Respect the client/patient and always pay attention to his/her personality
- Do not overtax the residents/patients/clients
- Avoid stress and agitation
- Demonstrate security and calmness
- Use gentle movements
- Always keep a sense of humour

3.3.2. Take into account the following:

- During active AAA, the tasks should be explained and/or demonstrated in single steps. Afterwards, if necessary, some help or support should be offered.
- The activities of the animal should be explained and commented; alternatively, a discussion with questions about it should be started.
- Small breaks should be made in the interest of humans and animal and a calm, relaxed atmosphere created by the presence of the animal should be continuously supported.
- While the animal has its break, you should try to start a conversation. You may start with someone's biography (What was the animal called that the client used to have years before?) or guessing the animal breeds or dog's names.
- If the participants withdraw themselves from the conversation, you should try to draw them back addressing them by names or with the help of eye contact.
- Although you always have to address single persons in groups, you also have to keep an eye on the group as a whole.
- During the whole visit the team should be flexible, i.e. ready to change the procedure and allow deviations if necessary.

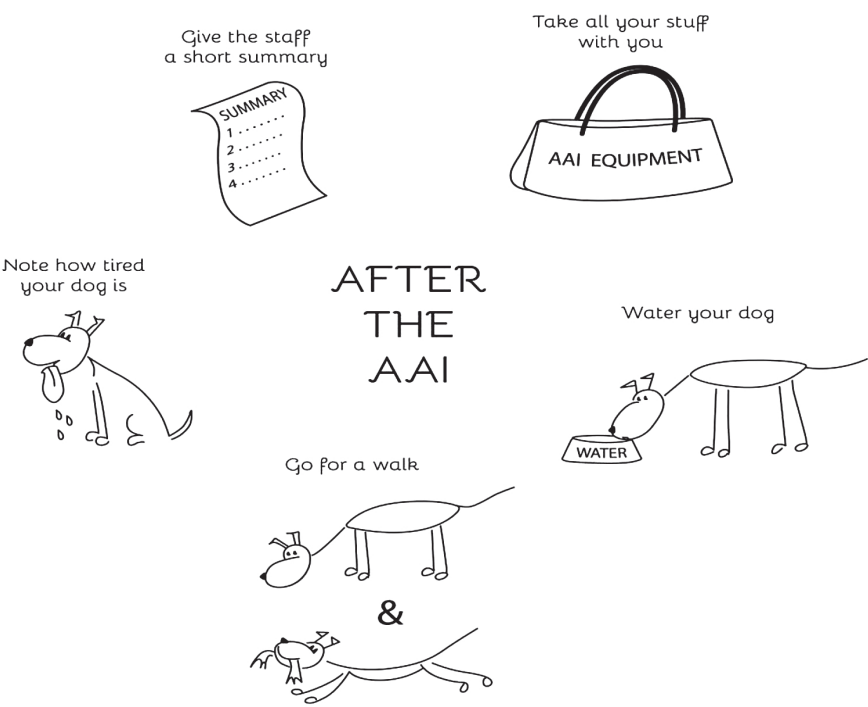
When you are working with your dog it is essential that you pay attention to your dog's stress signals. This is important both for the welfare of the clients and for your dog's welfare. In the chapter communication you will learn more about dog language. And in the chapter stress more about stress in dogs.

3.3.3. Post-processing

- Pack your equipment
- Say goodbye to (each) participant
- Be sure that all participants wash their hands
- Clean the place by washing/dry mopping the floor:

- If possible, at the end of the visit, you should speak briefly to the staff in order to draw their attention to any irregularities and remind them that the participants should wash their hands after the activity.
- Countersign the visit in your notebook.
- Make sure that your animal can relax and get some rest; (*see illustration 2: After the AAI*).

Illustration 2: After the AAI



3.3.4. Documentation and goal control

- Short documentation on the type and duration of the activities (see evaluation sheet).
- Reflection on the behaviour and reactions of the participants.
- Review and possible improvement of the assessment criteria.
- Reflection on what goals were achieved and to what extent.
- Reflection on your dog's behaviour.
- Possible review of goals.
- Address and scrutinize possible problems.



Chapter 4

Basics of the Human-Dog Relationship

Prepared by Line Sandstedt and Mari-Louise Asp

4.1. History

The human-dog relationship goes back a long time. The dog was the first domestic animal, and the dog's ancestor, the wolf, was probably domesticated by hunters and gatherers, long before they settled down as farmers (Savolainen in Jensen 2010). Humans, through selective breeding, have changed wolves into dogs; a "man's best friend". When we domesticate a species such as dogs, it leads to a retention of juvenile-behaviours, thus a dog will show more juvenile-behaviour in adulthood than a wolf (Coppinger & Shneider in Serpel 1995). Having studied free-ranging, unowned dogs, when looking at the organization of social behaviour, researchers found that a lot of different breeds have problems in maintaining stable groups with other dogs. They cannot cooperate to hunt large prey; therefore, in one way or another, they rely on humans for food. Dogs brought up with humans form a closer relationship with them than wolves brought up with humans. Dogs both read human signals and communicate very well with humans. Dogs have acquired a skill for communication "with humans in a unique way" (Hare et al., 2002 in Jensen).

Throughout time we can see a huge difference in the way that dogs have been kept, along with a large cultural diversity. In earlier times, dogs were often kept because of their ability to work as guard-dogs, herding-dogs and police-/military-dogs. These dogs often lived outside in kennels. Nowadays dogs are more frequently kept with the family as family-members, and are kept for such reasons as company and friendship. From being dogs' masters or owners, today many people regard humans as benevolent leaders and guides for their dogs (Pregowski, 2015).

4.2. Attachment

It has been found that dogs can relate to humans on the basis of attachment and that they also benefit from this. So far, the data indicate that the relationship between dogs and their owners is associated with the same neurobiological mechanisms that underlie relationships between humans (Julius et al 2012). Attachment refers to a particular type of bond that develops between an infant and its primary caregiver, usually the mother (Bowlby, 1958). If the infant has a secure and healthy attachment to its caregiver, it will feel safe to explore its surroundings. If it gets scared, it will return to the safe base (Ainsworth, 1989 and Waters and Cummings, 2000). Initially, scientists believed that attachment was only related to food. However, Harlow demonstrated that attachment develops as a result of the mother providing "tactile comfort", indicating that infants have an innate (biological) need to touch and cling to something for emotional support. Palmer and Custanse (2007) found that dogs were exploring their environment more in the presence of their owner than in the presence of a stranger. Dogs also increased the amount of independent play when their owner was present.

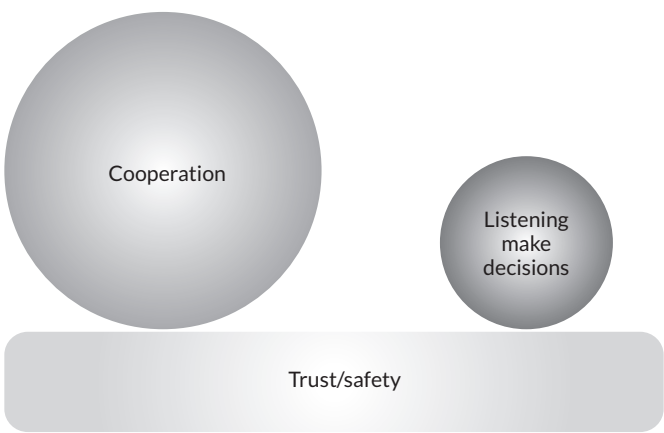
4.3. Relation

In this respect, it is important that we change our way of looking at our relationships with our dogs. Recent research shows that dogs are not wolves. Hence, our relationships with dogs do not need to be based on the rules applied in a wolf society, such as pack order system with a strong hierarchy. On the other hand, looking at dogs as children is not necessarily the right thing to do, either. Both types of models seem to fail to recognize the exceptionally high variability in the dog-human relationship (Miklosi, 2015). Miklosi writes in his book *Dog behaviour, evolution and cognition (2015)* that it will be better to develop new models, based on different approaches. One possibility could be to use the concept of friendship. That will include the possibility to be equal collaborative partners by playing different roles in the social interaction.

Recent research on pack structure shows that long-term relationships are preferred and are an important aspect of this friendship. Good relations give security, experience and increased access to food. It is also of essence that pack members can reconcile after a conflict (Svartberg 2010).

4.4. Relation – structure

Illustration 3: Relation – structure



In his book *Bra Relation* (2010), Svartberg developed a model for human-dog relationships. He talks about three specific roles that we have to consider regarding our relationship to dogs. He emphasises the importance of trust, cooperation and the ability to decide (or make a decision). If you have friendship, trust and security, the dog will feel safe with you, and the desire to feel safe is very important to all living creatures. through cooperation, you teach your dog that you are positive and that you work with your dog's positive emotions. The dog also needs to know that it has to adjust to you, even if the dog does not want to do so (decision-making).

This is a flexible and dynamic model (Svartberg, 2010). If you lack something in the trust area, you will need to work on that element. And after working on it for some time, you may find that the dog does whatever it likes and you then have to work within the red area. Some people like the green circle to be very large and the red one to be very small. Then again, in other relationships the red circle can be bigger and the green one relatively smaller. Sometimes we see different relationships depending on the handler and the dog, and possibly depending on the situation.

4.4.1. Trust

If the dog trusts you and relies on you, it will be easy for it to relax and to overcome scary situations. You need to be very clear in your communication with your dog. When life is difficult for the dog, the situation can be eased if the owner feels and acts calm and relaxed, as the dog will then sense the owner's state of mind. Safety with and trust of their owner is especially important for dogs working in animal-assisted activities. Working close to and interacting with unfamiliar people is not natural for dogs. There will be challenging situations for the dogs which could make them feel threatened. If the dog and the handler have a good relationship, and the dog feels safe and secure, the dog can cope with the situation much better.

The need for trust and safety is very important for all living creatures. Maslow suggested that people possess a set of motivation systems in which the basic level has to be fulfilled before you can reach the next level:

the Maslow hierarchy of needs. In this model the physiological needs related to safety have to be fulfilled first. Therefore, safety is the basis of this human-dog relationship model (Svartberg, 2010). The dog has to feel friendship and security from their owner. If the dog likes to be near you, it will be easy for it to relax when you are relaxing. If it gets scared, it will cope better if you have a good relationship. The dog needs to know that it can trust you in all situations. This puts a huge responsibility on the owner and it is important that the owner takes this responsibility seriously and protects the dog from danger and potentially dangerous situations. This has to be the platform in both everyday life and at work. The owner has to be calm and relaxed; otherwise, the dog will not be able to calm down or feel safe. The owners' communication should be open to dogs' feelings and state of mind. When hands and body are used in a calm and relaxing way, the dog will find peace and security in contact with humans. Touching the dog in a nice and positive manner will help release the hormone oxytocin, which is associated with a positive emotional state (Mitsui et al., 2011).

An owner must take care of the dogs' basic needs, such as food, water, warmth, sleep etc. (ref. Maslow). However, Svartberg (2010) also believes that you must show the dog you care about it and that you enjoy spending time together. Try to find some peace and closeness that both the dog and you can appreciate. It is nice if you can relax and sleep together. Yet, you must also teach the dog to feel safe when alone without you as well.

Work on being calm and relaxed. When we are together with our dog, we often do things: we go for a walk, we engage in training or play. Sometimes, the only place where we are calm and relaxed is inside our house (and even here we could actively play with the dog). The relationship between dog and owner will improve if they spend more time just being together, not doing anything outside of the house as well. The handler can, for example, go to the city/market, and sit down with the dog between his/her legs. The reason why it should sit between its handlers' legs is that the dog will feel safe sitting like this. The dog has the handler behind and the world in front, and the handler can secure the dog in this position. No humans or animals/dogs should be allowed to greet the dog while it is sitting in this position. The handler has to convince the dog that this

is the safest place for him/her to be. As the handler, make sure that you look in the same direction as the dog. Do not look at the dog, eye contact will make the dog's expectations rise. You can use this when you want to be active with your dog.

Trust is not something anyone can buy or get, trust is something one has to earn from the dog. Presence is very important for building a good relationship with the dog; it is essential that you and the dog spend time together just observing the strange world.

The handler has to be aware in all situations, think ahead and take responsibility for the dogs' experiences. In situations where the dog gets scared, panics or even shows aggressive behaviour, the handler must stay with the dog until it is relaxed and calm again. It is common to get frustrated, angry and stressed if the dog is acting up, but it is not a clever strategy to respond to negative behaviour with more negativity. The result could be that the dog gets even more frustrated or scared or it may think that the handler is also afraid (Svartberg, 2010). Stay calm.

In animal-assisted activities it is easier to do a good job if your dog is calm and relaxed when you are, and alert and ready to work when you want him/her to be. For the dog and its welfare, it is crucial that it is confident and content (relaxed and secure), when participating in animal-assisted activities. It is very important that you, as the dog's guardian, read the dog's signals and act upon them.

4.4.2. Cooperation

Working within the area of animal-assisted activities is a challenging task for dogs. In addition to being secure and relaxed, they have to interact with the client and the handler. Co-operation with the handler is essential, so you must invest a lot of time developing this side of relationship with your dog. The relationship with your dog will be much easier if the dog perceives you as a fun and attractive person. If you give the dog interesting and positive cues, the dog will follow them and will develop a positive attitude towards you. Instead of only walking the dog, you can do a lot of interesting things as well. When the dog runs in front of you, you can

take a toy or a treat (something that the dog loves to play with or likes to eat) and hide it in a tree. Then you can start to walk around the tree looking up at the item you put there. After a little while the dog will come and see what you are doing, then you can point at the toy/food and say something about it to the dog. You can then take it down and give it to the dog. In this way the dog will look at you as a great “hunter”, you find things that the dog cannot find. Another thing you can do, for example, is to put/hide treats or toys (hide it well) around a tree or a pole and do the same thing the dog does (instead of looking up, you can act like you are sniffing the ground). Your imagination is your only limit in showing your dog how clever you are! Make the dog follow you: instead of calling the dog’s name when it is off the leash, you can go in the other direction without saying anything to the dog. When the dog comes to you, you can give him/her a reward. The reward can be food, a toy or a lot of praise from you. The main thing is that the dog loves the reward, so that it chooses it rather than all the other things that it could find elsewhere. Having good rewards that the dog really loves is important for the relationship. Take some time to find the right reward for your dog. The dog that will play with both an object and its owner is easier to train than a dog that is very picky with their rewards. Playing is important for many mammals. Researchers believe that playing can facilitate the establishment of behavioural routines, strengthen individual relations and provide physical and mental exercise (Bekoff and Byers 1981). Playing will provide several positive experiences in the relationship between the handler and dog. Dogs that want to play with humans are easier to train than dogs that do not like to play (Asp et al, 2015). Dogs are less competitive and more interactive in play with humans than when playing with other dogs, they give up possession of toys more easily in play with humans, and offer the object more frequently to their human play partners (Rooney et al, 2000).

When we work with animal-assisted activities, the dog has to focus on the client as well as the handler. We have to teach our dog to be focused and to interact with our clients as well as with us. It will not be a good activity if the dog just looks at and interacts with his/her owner. It is important to do this in the right setting: the dog should not be motivated/allowed to run at every person they see all the time. It is not good for the safety of

the dog because we can never be sure of what experiences it will receive greeting strangers. However, when the dog is in the “working-mode”, we want it to be motivated and alert to the clients.

In AAA we also need the dog to be always willing to co-operate with the handler. It is vital for the outcome of the session that the dog co-operate well, both with the client and the handler. We want this cooperation to give the dog positive emotions. Dogs that really want to do the things we ask them to do will do them much more willingly than dogs that are forced to do so. In animal-assisted activities it is important to develop this positive energy and willingness in the dog.

Co-operation is a factor that gives both the dog and the owner great value. Owners want to teach the dog that working together leads to joyful and fun experiences. It is really about finding positive resources in both the handler and the dog. Then the dog will be engaged, happy and playful. One of the handler’s tasks is to find rewards that help the dog develop these feelings (Svartberg, 2010).

4.4.3. You make decisions

In some situations, especially in everyday life situations, we have to be able to stop the dog and redirect it to something else. It is of immense importance that the dog listens to you, even if the dog really wants to do something else (e.g. chase a cat). In animal-assisted activities we can experience that when we work with a client in a group, the dog may want to go to someone else. Then we have to be able to stop the dog and redirect it to the client it is supposed to be engaged with.

Dogs seem to be open to human control and rules. If the handler is clever and shows the dog that he/she knows best and is in charge of the resources, it is quite easy to get the dog to respect the handler’s will. Around humans, dogs are less liable to defend their resting space and food resources, they see toys as something to co-operate on, and they learn that humans will not be interested in being their potential sex partner. Of course, a dog can be aggressive towards their owner, this will often be in situations when the dog experiences pain, when the dog is afraid or when

the dog has something it does not want to share. That should be looked upon as lack of confidence and not as if the dog wanted to take “charge” (Svartberg, 2010).

If the dog rather would like to say hallo to another dog instead of working together with us, it is important that we can stop the dog and redirect the dog’s focus. One good exercise to practise this; is to stop the dog when the dog really wants to do something, for example when the dog wants to play with other dogs. Then you can use the same exercise as you do when the dog is learning to relax together with you. Set the dog between your legs. The dog should sit in this situation, even if it does not want to do so. In this situation you have to be firm and calm to convince the dog that this is the only way. Use your hands, not your voice, when you want the dog to sit. You can try to lure the dog into the position with a treat. If the dog does not want the treat, you can use your hand and push it firmly on the back. When it sits, you can talk calmly to it and stroke and massage the dog’s skin gently with your hands. If the dog tries to get up or wants to get out of the position, use your hands firmly and calmly, making sure the dog stays in the sitting position. You can put some treats in front of the dog, and give them to the dog when it sits still and when it is calm. If the dog tries to jump up and take the treats when you are reaching for them, just put them back. The dog has to sit still all the way. This position can be used when your dog really wants to do something and you want him/her to calm down. It is important that the dog knows the command of sitting between your legs before you demand it in a challenging environment.

Another thing to remember is to make sure that you do not try to set boundaries for your dog when the dog is far away. If the dog jumps up on the table and takes your food, and you are 3 meters away, you cannot do anything. If you tell the dog that this is not allowed, and it eats the food anyway, you teach it that it does not have to listen to you. But if you are 1 meter away, and you can actually stop the dog with your body, then you can tell the dog that this is not allowed. If the dog runs to another dog, and you know that the probability for the dog to come when you are calling is zero, do not call. You just teach the dog not to listen to your commands. But if you have the dog on a long leash, and you have hold of the leash,

you can call the dog. If the dog does not listen, you can stop it with the leash and call one more time. The dog learns that it has to listen to you and there is no way around your commands. It is important that we do not demand more of the dog than is reasonable, we cannot expect more than the dog can cope with. If we put the dog in situations it cannot cope with, the dog will lose its trust in us, and the good relationship we have established with our dog will crumble away.

4.5. Dog-Human relationship in Animal-assisted activities

To make the job easier, it can be helpful to use a work sign. The sign will make it possible for the dog to recognize the work situation and separate the expectations from other tasks in everyday life. When the dog knows what it is expected, it will try harder to obey and to master the tasks. Of course, we have to prepare “working behaviours” well in advance so that the work situation is easy to figure out. The sign (“uniform”) can be a scarf, a harness or a collar. You put it on during training and work. When the dog wears this, you train the dog, for example, to play with or to be close to a client, or to interact in different ways. This will have to be both fun and rewarding for the dog, so you can use treats or toys in the training, but in the work situation we want to restrict the use of food and toys. The rewards tend to distract the activities, so the dog has to be able to work for long periods without a treat/toy before you begin working with the client. On the other hand, there are several clients that are highly motivated in giving the dogs treats and, of course, they can do so, but not all the time. At the same time when the dog interacts with the client, it has to keep listening to you as the handler. You have to be able to redirect the dog if the client does something that he/she is not supposed to do. The same applies to situations when the dog has too much motivation in doing things that are not suitable in that situation.

When it comes to relationships, you get what you reinforce. If we are holding onto and nourishing good feelings, after a while we will recognize what makes our dogs happy. A dog that is happy and has a good relationship

with their handler has often much to give in the presence of other people. A dog that is safe and contented with their handler has often good strategies in interacting with strangers as well.

Working in animal-assisted activities require an excellent relationship with our dogs. If your dog is confident, happy, willing to co-operate with the clients, loves being with you and wants to listen to your cues, you have an excellent base for both work and everyday life.

4.5.1. Ethics in Animal-Assisted Activities

Ethics are the rules of behaviour based on ideas of what is morally good or bad (Merriam Webster dictionary, online).

In animal-assisted activity the ethical perspectives should be in focus all the time; as a result, the "work" will be both interesting and demanding. We need to be aware of ethical dilemmas, perspectives and reflections concerning the dog, the client and the environment.

Our goal is to improve the quality of life through activities, and a good activity should, if possible, bring growth and well-being to all parties involved. If that is not the goal of the activity, we should rather give it up.

4.5.1.a. Dog

When we choose to bring the dog into the role of a working companion, it is often of great value to be aware of different ethical perspectives. We take on great responsibility for both animal and human well-being. Sometimes the will to help a person can cloud our judgment and get in the way of our ability to truly see the animal (Clothier, 2008).

We have an obligation to engage in ethical and responsible decisions in the selection of working animals. Choosing an animal with the right individual characteristics requires knowledge of their language and needs. We also have to take ethical considerations into account when it comes to working age, duration, frequency, intensity and signs of stress.

The dog often has to go against its instincts when doing the job, and that is a significant challenge for some dogs. Research shows that some

dogs benefit from being with some people and not with others. Some of the clients might have handicaps that make them interact with the dog in a special way, and the dog might need training for specific situations. As handlers, we can ask ourselves some elementary questions that can bring clarity to whether the dog should perform the tasks we are giving it:

- What is the job the dog is supposed to do?
- How can we fulfil the dog's individual needs?
- What is unique about this particular dog?
- Is it reasonable to think that the dog can do this job?
- What does the dog need to do in the job?

These fundamental questions let us see the job from the dog's perspective and make it possible to monitor how the dog will fit and feel in the specific job situation (Clothier, 2008).

The words we use when we speak of the dog as our working companion is another ethical issue. If we talk about the dog being used in the activities, we objectify it. While the handler is the one making decisions and reflections for the team, it might be useful to emphasize the dog's status as an individual with its own needs and rights by saying that we "use the relation between dogs and humans" as a tool to help people grow. If we call the dog our working companion or partner instead of saying that we "use" it, it will be easier to remember that we need to cooperate and that it is a give-and-take situation. A good handler offers the dog the best working conditions possible by being able to actually see the individual dog.

Ethical considerations to protect and respect the animal partner are important and the dog has to have a handler that knows the meaning of the dog's well-being or discomfort (Fine, 2001) (see chapter "Communication").

Lack of rest, recovery time, opportunity for recreation, lack of structure in a daily schedule and unintentional maltreatment were mentioned as the primary concerns for the welfare of visiting dog working with autistic children. (Burrows et.al, 2008 in Fine, 2001) p. 433 (see chapter Animal welfare).

It is an ethical issue whether the long-term effects of being a "working-dog" are positive or negative for the well-being of the dog (page 357, Zenithson

et al. in Fine et al, 2015). Sertpell et al (2000) found in their study that risks like poor welfare and loss of dignity may occur in therapy situations.

If you read chapters on “Animal welfare”, “Learning theory”, “Dog training” and “Human- dog relation”, you will find what dog’s living conditions, training and relation to its owner should be like to make it a good partner in animal-assisted activities; (see illustration 4: Prepare your dog to AAI).

Illustration 4: Prepare your dog to AAI



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4.5.1 b. Human

A good pairing between client and human-animal-team is essential for the result of the activity.

Life circumstances, individual characteristics, and client’s medical, physiological and physical status are the areas that we need to know something about to be able to organise good activities. In addition, we also need to have a good dialogue with the relatives and staff (Fine, 2001). We need to be able to adjust to the client’s needs in the activities.

People who that enjoy being with animals, and who want to interact right from the start, benefit more from animal-assisted activities than those who are persuaded by others (Fine, 2001).

Our social skills and ability to communicate can affect what happens between the dog and the client in a "three-partner" relationship. We can help the dog to perform behaviours that create a feeling of mastering for the human through training the dog. Sometimes it can be a dilemma to consider if the dog should be instructed by the handler or just by the client.

It is often necessary to explain to clients in a nice way, without insulting them, how to behave with a dog. Some clients have little experience with dogs, and even if the dog is well-trained, it might improve the quality of the activities if the human behaves in a more predictable way. Sometimes situations can also occur where we need to protect the dog from rough handling by the client, and it is essential not to hurt the client's feelings when we do so (see chapter on Risk management).

Even if the activities are conducted in an institution, we need to remember that we enter the homes of the residents. Respect and consideration are the words to remember in this context. We need to make sure that we are welcome, be sure that the client's voice is heard and that the activities do not disturb or interfere with any of the cohabitants, personnel or relatives. Information is often essential for success and can ensure that clients avoid unpleasant situations. For instance, information about who the visitors are (including perhaps phone numbers, if one considers them to be useful), their time schedule and areas used. This can help prepare residents and staff for the visit. This is a way to ensure that relatives who fear dogs can avoid those visiting hours, but still can come to visit the resident. It would be contrary to our goals if AAA should hinder visits from closer relatives. Another important issue is the privacy of everyone involved: client, relatives, cohabitants, personnel etc., present and future.

We also need to beware of treating the clients as a group of people rather than individual persons. It is easy to put the task ahead of the individual persons and to depersonalize people when we have limited time

and we are focused on how to perform the work. For example, we may fail to give each client what they need, when we have a whole group of

people to visit (for example, in a nursing home). It is important to be fair and concerning to the time we spend with each person. Some people need more time with the dog than others, and it can create a dilemma for the handler how to organize the activities.

As we can see, it is important to be aware of possible conflicts of interest. It is also essential that we are willing to absorb information and knowledge and have an open mind to how the work should be done to meet participants' needs in the best possible way. It is also important that we want the best for both the dog and the clients. It is advisable to be well-organized and to have someone to consult with. It is also appropriate to keep up-to-date with recent research and regulations pertaining to our work.



Chapter 5

How to choose a dog for AAA

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Several criteria predetermine if a dog is suited for work in AAA, the basic ones being: dog's age, breed, physique, and mentality. The right personality is essential to the safety and efficiency of AAA. A well-trained and confident dog is the basis of the training. However, if the activities are to be successful, obedience is not enough: in order to maintain the right level of motivation and good atmosphere during the training, the dog should be cooperative, relatively active and cheerful. Not every dog is suited for work in therapy. If the personality of a given animal is known, the right choice can be made – not only in terms of approving the dog for training but also selecting the right profile of settings (different dogs do well in different jobs). To select the right dog, the dog's mentality has to be evaluated; we recommend that it is evaluated after maturity, that is, when the dog's character is fully developed. The dog should be evaluated by a person with: minimum 3-year university degree in animal behaviour, experience and education in the ethology of dogs, and experience in AAA.

5.1. Dog's age

When choosing a dog for AAA, the handler needs to decide whether they want to bring up a puppy or prefer to adopt a grown-up dog with a fully developed personality. The choice of a specific puppy does not predetermine success, but it increases the chances of the dog's correct personality. It is also important that the dog's and the handler's personalities match (Fisher, 1994). The advantage of choosing a puppy is that one can freely choose the breed and, moreover, a particular pup from the litter.

As far as puppies are concerned, there are a number of methods to test their temperament/personality. But none of these methods gives us full knowledge about future dogs' personality – puppies' personality is changing during the growing up process. That is why, personality tests for puppies seem to be a good method to make the choice, but we have to have in mind that there might appear some changes. The projections made in the course of such observations are very limited but they are widely used by both breeders and buyers who are looking for a working dog. O'Heare (2009) demonstrates that tests often identify extreme behaviour more accurately than average behaviour (p. 133), but it is the latter type that is crucial in the day-to-day work. Coren (2005) points out that some behavioural features can manifest themselves later than in the 7th week, when tests are typically carried out.

The challenges of selecting the right puppies and the long period (nearly two years) until dog's maturity speak in favour of getting a grown-up dog. An adult dog has advantages: a formed character, temporary behaviour that is easy to identify, a visible temperament. It is also relatively easy to identify the dog's habits. Gosling et al (2003) and Ley et al (2008) demonstrated that a dog's personality can be judged just as it can be judged in humans and that it has analogous dimensions (Coren, 2005, 2006). Svatberg et al. (2002) list: playfulness, chase-proneness, curiosity, sociability, and aggressiveness as well as a higher-order factor, i.e. the shyness-boldness dimension. On the other hand, Ley et al. (2008) enumerate such traits as: extraversion, neuroticism, self-assuredness/motivation, training focus, and amicability. There exist psychometric instruments that can be used to judge a specific dog on these dimensions, for example the DMA (Dog Mentality Assessment),

which was developed by the Swedish Working Dog Association (Falt, 1997 quoted in: Svartberg, 2005) and MCPQ-R (Monash Canine Personality Questionnaire – Revised) which is based on the five-factor personality model by Costy and McCrae (Ley, McGreevy, Bennet, 2009).

There is a downside to choosing an adult dog – its history remains unknown and so do past experiences that can manifest themselves later on. It is not always possible to buy a grown-up dog of a given breed, but it does happen that breeders offer mature animals for sale. In dogs adopted from shelters or temporary homes the risk of problematic behaviours due to past experience (often traumatic) is even greater. The amount of anxiety-related behaviours among dogs placed in shelters increases (Barrera et al., 2010). Moreover, post-adoption behavioural disorders, including aggressiveness towards strangers and resource guarding can intensify with time (Stephen and Ledger, 2007), which can be easily explained by the tendency to suppress certain behaviours in a shelter (Klausz et al., 2009).

Therefore, both in the case of puppies and adult dogs, the handler needs to invest an appropriate amount of time. It is important to think the matter carefully through, especially if the dog is to accompany you in AAA.

5.2. Knowledge about breeds

In order to increase dogs' usefulness, people developed many breeds and varieties that are best suited for specific tasks. Scholars prove that various dog breeds present substantial differences in personality (Svartberg, 2006, quoted after O'Heare, 2009). This means that crossbreeds reduce the likelihood of predicting a dog's future behaviour. However, a wide range of personalities can be also observed in one breed (Diederich, Giifroy, 2006). Differences in animal personality determine how they react in new situations, avoid dangers, or deal with social situations (Reale et al., 2000). This is why, it is more important to choose a dog with desired traits than a particular breed. In every breed you can find dogs not suitable for AAA and, on the other hand, among breeds that are typically not used for this kind of work, there are dogs that are just perfect for AAA.

When looking for a dog suitable for AAA, the focus should be on dogs bred so that they:

- are not aggressive towards humans,
- closely cooperate with people,
- live with people or close to them.

It is advisable to choose from among breeds that enjoy contact with humans, learn easily, love to work with people, are psychologically resilient and pleasant-looking. Dogs bred to guard homes and frighten strangers or to fight dogs/animals are usually not appropriate for work in AAA. It can turn out that even if they love humans, they might have problems working with other dogs.

There are people that are afraid of black dogs, which can be clearly seen in the work with people suffering from schizophrenia. Yellow or chocolate Labradors are more welcome than black ones. The effect of black colouring can be downplayed by letting the dog wear a coloured harness or a scarf.

Excessive drooling may be a problem with some breeds. Some people find it distasteful and it can make unnecessary reservations in people participating in the activity. If you have a dog that drools it is important to have towels with you to wipe the drool and to use blankets if the dog is saying hallo by putting his/her head in the lap of the clients.

In AAA, especially when working with children and people that have problems with coordination, miniature dogs should not be used (<5 kg). The fragile bodies of such small dogs could be accidentally damaged.

5.3. How to select the breeder

Apart from the breed itself, the choice of breeder also matters, because personality is not only determined by genetics but also by the situation at birth and early stimulation/experience (Stur, 1987, quoted in Diederich and Griffoy, 2006). If the dog is to fulfil certain functions, in addition to the breed it is recommended to choose a particular breeding line, and a particular puppy from the litter. Sex matters as well: males are more

active and playful, but they are often more aggressive and domineering; females are more trainable and sociable (Coren, 2005, p. 162).

A good breeder should know the breed well, including its strong and weak points, and answer all our questions without hesitation. Ideally, they should also be familiar with AAA and work with dogs on a daily basis. People who have bred dogs for many years are more experienced, can raise puppies better, and first and foremost they understand more about puppies' behaviour. It is recommended to check the breeder's experience and approach to training. Puppies should be raised at home with people, children and other animals. Starting from the third week, puppies should begin socialising. It is the breeder that should start to socialise puppies and begin environmental training. The breeder should provide an appropriate setting, with different kinds of toys and fixtures – soft and hard, small and large, moving and still, squeaky toys, toys with fringes for chewing, etc. Puppies need to become familiar with different types of surfaces (sand, tiles, hardwood, cobblestones, grass, carpet), bowls, sounds, adults (fat, skinny, tall, short, wearing hats or flowery skirts, using walking sticks, etc.) and children. They should get to know at least one steady, adult dog. The more variance in the environment, the better puppies will be prepared to go to new homes, provided the breeder made sure puppies have positive experiences and time to rest.

It is best if only one litter at a time is raised. It gives the breeder the time to invest in raising the puppies and to observe their behaviour.

One should get to know the mother (the father as well, if possible) and see how she behaves and if she is in good shape. The bitch should be friendly, cheerful, willing to meet new humans. She must not show anxiety or aggression. It is recommended to ask the breeder why they chose particular animals to parent the litter and how they would describe the character of both parents. The breeder should not focus on appearance only – the dog should first and foremost be healthy and manifest behaviour typical of the breed. When choosing the breeder, ask about the tests that were carried out on the parents. If there are tests for genetic disorders in the given breed, it is recommended to check if the breeder had them done and what the results for the parents were.

It is essential to check for the degree of hip and elbow dysplasia. Dysplasia is a genetic abnormal formation of joints. In most cases it leads to secondary degenerative changes. Dysplasia does not have a simple inheritance pattern because its development can be affected by environmental factors, but a puppy whose parents did not suffer from it will be less likely to experience it.

One can also check if the parents were trained – usually dogs with higher levels of training have a stronger psyche and are more motivated to work. Most psychological traits are inherited. If adult dogs at the breeders are lively, cheerful, bold, resilient, if they enjoy physical contact, if they are willing to work, it is probable that some of the traits will show in the litter. The same applies to the pace of growth and reaching maturity, both physical and psychological. It has practical implications because the longer a dog matures, the later it can start to work, and usually it grows old later.

In the case of purebred dogs, it is necessary to check if its pedigree is certified by an organisation associated with FCI. Such a certificate guarantees that the puppy's ancestors were purebred for generations, tested and selected.

Still under breeder's care, puppies should be dewormed and vaccinated at least once. The breeder should provide the new handler with deworming and vaccination schedule.

5.4. Female or male dog

To choose between a male and female dog is sometimes difficult. A lot of people have strong preferences for the sex of the dog. The differences between an intact male and an intact female dog may be quite large, depending on the breed. Male dogs often are bigger and more muscular than female dogs. They tend to wander more and they may be very attracted towards bitches in heat in their surroundings. Bitches are in heat about two to three times a year, and their hormone level may cause some unpredictable moods, male dogs often have more "boldness" than bitches (Svartberg, 2000). A dog with high boldness can be a greater challenge to own. Male dogs have lower trainability than female dogs (Asp et al. 2015). Serpel (1995)

found that male dogs, compared to female dogs, showed more aggression in contact with other dogs, and they showed more "dominance behaviour" towards their owner. There is no problem about working with dogs that are not neutered. In Norway, for example, it is not allowed to neuter a dog that does not have medical problems.

5.5. How to choose the puppy from the litter

It is not easy to pick the right puppy from the litter. When choosing a puppy from an experienced breeder familiar with AAA, it is recommended to take their opinion into account. It is also advisable to visit the breeder with a person with broad experience in AAA who is skilful in observing puppies. It takes years of practice to judge a puppy's behaviour correctly! Temperament tests can be helpful.

The first and the most popular tests have been developed by William Campbell; they focus on the following factors: excitability/inhabitability, active/passive defence reflexes, dominance/submissiveness, and sociability (Coren, 2005, 2006). Like other tests, this test consists in observing the pup and performing certain activities, such as holding the dog, lifting it up, etc. Fisher (1994) recommended to include such factors as encouraging the pup to establish contact and follow the human (sociability test), rolling the animal over and keeping it still (tests reaction to being held in position), holding the hand on the pup's neck (reaction to social domination gestures) and lifting the pup (reaction to full domination). There are also other tests that define the dog's tendency to collaborate with people, their fearfulness, tendency to dominate over its siblings and general level of activity (Coren, 2006; Svartberg, 2005). Bixler (2003) describes very detailed procedures that assess as many as eleven qualities. The final score is the sum of all eleven scores: interest in socialising with people, tendency to follow a human, three types of domination behaviour, reaction to touch, reaction to sound, reaction to visual stimuli, persistence, interest in fetching, and general liveliness. Bixler (2003) indicates that the initial interpretation of a pup's behaviour should be only the first step to find the best owner for it and a kind of activity that will allow its natural skills to develop.

Picking the right pup is not easy and it takes some time. It is possible that during the tests the most active pups have gone to sleep tired, and the lazybones is having a fit of liveliness. This is why, puppies need to be observed for a longer time. Behaviour tests are advisable, but they should be accompanied by a longer observation of the entire litter and particular pups. If possible, it is recommended to visit the breeder a couple of times. The more one knows the puppies, the more accurate choice one can make.

First, puppies should be observed in a place which is familiar to them – watch how they play with their siblings, if they are aggressive towards them or submissive, if they are willing to collaborate with people, if they are playful, how they react to the breeder's and strangers' touch, to noise and to stress.

The next stage should be in observing the puppy in a familiar place, but without its siblings. Its reactions to people and willingness to play with familiar and new toys are tested. Then, one needs to check the reaction to unfamiliar devices – for example, devices that produce strange sounds or have blinking lights – and to pressure and holding in position. All the time, one should bear in mind that this should not be a one-off test, otherwise, it will not be viable.

At the third stage, the pup is assessed in an unfamiliar environment. The reaction to humans, playfulness, sociability, and the reaction to touch are tested again, as is the reaction to toys and strange devices, but siblings are not close anymore.

5.5.1. Choosing an adult dog

When choosing an adult dog, it is essential to interview the previous owner/handler, the breeder, or the shelter staff. Crucial information includes:

- whether the dog was around children, what its experiences are and if it is fond of them,
- how the dog reacts to grown-ups,
- whether the dog enjoys physical contact, where it likes to be petted, if there are types of touch it does not accept,

- whether the dog is afraid of unexpected noises or other things,
- whether it likes to eat and what,
- whether it likes to learn,
- how it reacts to other dogs.

Next, the potential new handler should accompany the previous owner and the animal during a walk and observe how the dog behaves in a familiar environment and in new places, how it reacts to children and strangers met in the street.

The dog should also be observed inside a building and the following factors should be taken into account:

- dog's behaviour in the new environment, on an unfamiliar floor
- its reaction to staying with strangers in a locked room
- its reaction to adults (does the dog approach people willingly, does it enjoy physical contact, does it allow people to touch it anywhere, to be groomed, to have the teeth examined?)
- reaction to pressure, to a person leaning over the dog, to being held still, to being lifted off the ground
- reaction to unexpected noise
- reaction to a "strange" device – something that moves, is noisy or very big
- whether the dog allows strangers to touch the food in the bowl or to be taken away from the food
- reaction to people who move in an untypical way, in a wheelchair, with walkers or walking sticks
- whether the dog is willing to establish contact with a human, whether it can focus on someone and for how long

There is no certainty if the dog will be successful and at ease with AAA, but the odds improve if a professional assists in making the choice.

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Chapter 6

Early training and socialization

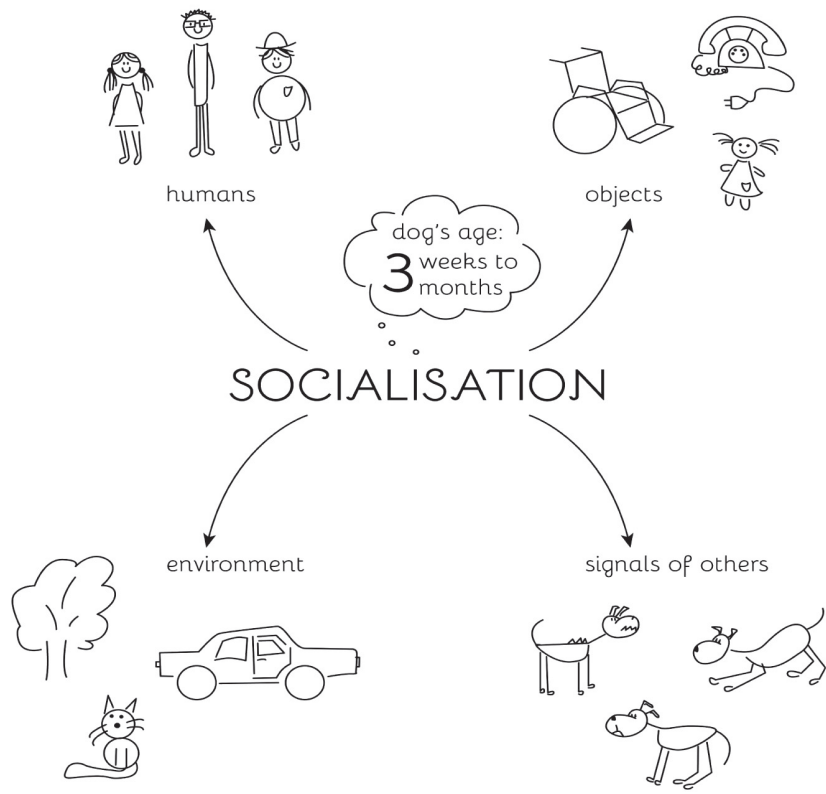
Prepared by Rainer Wohlfarth and Bettina Mutschler

6.1. Socialisation

Socialization period (3 weeks to around 3 months of age) is the process where the puppy is primed for bonding to humans and other individuals; they also learn that people, objects and environments are safe and they learn what body cues and the signals of others mean. How much socialization each pup needs will depend on the breed, the actual individual and the mentality of the bitch, as well as the quality of the surroundings where the puppies are held. Attachment will build up to the main caregiver, who is in the best case a secure base and a safe haven; (see illustration 5: Socialisation).

It would be desirable to pay attention in the selection of breeding dogs, both bitches and stud dogs, to genetics, epigenetics, susceptibility to stress, physical and mental health and a trusting relationship with the breeder. The temperament of parents, both the mother and the father, have a significant impact on the predisposition and development of puppies. The mating should be voluntary, a bitch that needs to be held down is raped. The hormonal and emotional consequences are probably similar to humans. The bitch should not be exposed during gestation to any exceptional situations

Illustration 5: Socialisation



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and should be in her familiar environment with familiar people. During her pregnancy and while littering, the dog needs a secure environment and people familiar around her. If she does not have it, she has considerably more stress than would be good for her. It has a direct effect on the puppies. Stress hormones are transmitted when puppies are in the womb and later through breast milk and the strained behaviour of the mother dog. This affects the dog's whole life concerning point of their susceptibility to stress. Depending on which hormone cocktail arrives in the brain of the

puppies, the receptors of the respective transfer agents are modulated in the brain. A lot of stress in the mother dog also means much cortisol for the puppies. Cortisol is active in the organism for a very long time, so it damages nerve cells, blood vessels and the whole metabolism. Cortisol floods build broad „nerve roads” in the brain, on which stress can spread more rapidly and stimulate nerve cells to trigger fear faster. Before birth the existing level of stress hormones seems “to program” the fetus during critical phases of its development: it is determined how the body deals with stress later. Through this prolonged stress, less oxytocin receptors are developed in the brain. Oxytocin serves as a kind of „speed bump” in the stress response. The lack of oxytocin receptors in turn leads to greater stress response later, presumably to increased aggressive behaviour and the affected individuals calm down much more slowly from stress-inducing stimuli. Stress during pregnancy thus makes the organism become “electric” faster both physically and mentally in their life later on.

6.2. Where puppies should be held/what puppies should learn

As dogs usually live in the house with people, it would also be appropriate to raise puppies also in the house. Even though it can be tiring for the breeder, a puppy enclosure in the basement or in the garden is not optimal. When puppies stay in the living area, they automatically enjoy all the sounds available in the household, from the vacuum cleaner, the coffee machine, the pot lid falling down, to laughter, clapping and yelling. Excursions in the garden should be held, of course, optimally while humans are present.

Sleeping / Resting in a box on a blanket

In AAA, it is important that the dog has a retreat place. This is both to protect the dog and to help the dog to relax. It can also be helpful for the clients, especially children and young people learn to accept that the dog must be left alone as soon as it is in the box or on the blanket. If you have a box/cage it will be easier to ignore the dog if they no longer are able to

see it. The dog, however, is protected from gazes and communication from the clients. Dogs are very sensitive to visual prompts. That is why putting a dog on a blanket lying in the client's view will not give sufficient rest to some dogs. To experience the box/cage as a safe place, the puppy should get to know boxes in its puppyhood as a great retreat. Several small boxes in the puppy run can be a good idea. Some puppies like to lie there alone, others share their box. After the puppy is taken from the breeder, the box can be helpful for finding peace at night. Since dogs are reluctant to pee in their beds, there is also a good chance that they will learn to tell you if they have to be let out. The first few minutes in a new home alone in the box make puppies feel more protected than if they were in a large living room. In any case, it is worthwhile to ask the breeder for help in advance.

We do recommend that the box/cage be installed in your bedroom during the puppy's first nights in the house. Later, when the puppy is safe with you and in the house, you can move the box out of your bedroom if you want to.

6.3. "Respectful" dealing with people

Dogs should take people seriously, this is especially important in the animal-assisted activity area. Dogs which act very physical cannot cooperate well in all situations. There are certainly people who are happy to be jumped at or jostled by a dog, but a majority of people do not like this. It makes sense to communicate to the puppies that people are not sparring partners. Even a six-week-old puppy gets a reprimand from the mother if it bites too hard on her ears or tail. Likewise, a person should set limits as well. A puppy biting on hands or feet should be pushed away. Not angrily, but in a determined manner. We would advise against behaving as another puppy and squealing, because we do not want to be seen as a sibling but as an adult. Puppies learn bite inhibition among themselves differently than from adult dogs. The puppies learn quickly what they are allowed and what they are not. Almost all puppies initially jump high at people, but you should resist it from the start. Usually all it takes is a small step forward

and a reproachful look. You should not worry, as it will not traumatize the puppy. The breeder and all the visitors also need to proceed like this. No puppy should be forced to have contact with people. If a six-week-old puppy wants down from your lap, it must be put down immediately, as it is important that it feels understood at this age, even if you want the puppy to stay on your lap. When the puppy is twelve weeks old, other rules apply. At this age the young dog already knows that people understand it, recognize and satisfy its needs. By restricting the puppy when it wants to leave your lap, you are training the puppy frustration tolerance. It is important that you do not immediately comply with the puppy's wishes. This is good for the puppy's development and just as important as it is for children.

6.4. Regular physical contact with different people

In its life as a companion dog, it will be confronted with many different people. This should begin already with the breeder. The dog should often have physical contact with different people or be active with them. Small games (e.g. first retrieving) could take place in its first six weeks. It is important that people are instructed that the puppy must not feel forced. If a puppy at this age already clearly shows that he avoids physical contact, he should not be chosen for animal-assisted activities. It is essential that you expose the puppy to it in its socialization period. Puppies who do not get adequate socialization during this period tend to be fearful of unfamiliar people, dogs, sounds, objects or environments. You need to understand your dog well: if the dog is uncomfortable in a situation, you have to stay in the situation until the puppy can cope with it; otherwise, you will get sensitization instead of habituation (see chapter Learning). That is why, you need to think carefully before you socialize the dog, so that you do not put your puppy into a difficult situation for him/her. In some cases, we should decide to withdraw from the situation so that the dog can see that the owner has understood that it is afraid. The pup should be exposed to people of all ages and sex: people in a wheelchair and with crutches, people that limp etc.

Rough handling and sudden high noises are also something you can prepare your puppy for. If a puppy/young dog is petted in a strange and rough way, it will get used to it. When the dog feels safe while you are doing it, people that come to visit your house can be instructed to do the same. When the puppy is walking around in the house, you can make a sudden high noise (e.g. a scream), and then act as if nothing had happened. The puppy will at first be very surprised and perhaps a bit worried, but when it sees that you are calm and relaxed he/she will probably not care. If you see that it takes a long time for the puppy to settle down, you have to make a less scary sound the next time. For the puppies that regain comfort in a short period of time, the noise can be even higher the next time. Bringing a grown-up dog to institutions will expose your dog to both rough handling and loud noises from strange people. The dog that is used to both, in a safe environment and with people it knows, will feel secure.

6.5. Joint activities with people

While it is very time consuming, it is desirable that the breeder takes times to play with each puppy. In such a situation, the pup learns early to have fun without his siblings and the breeder gets to know individual puppies. The selected activities should be fun for the dog. At this point it would be rather counterproductive to practice ‘sit’ and ‘down’. For most puppies, it will be attractive to explore unknown territories and to play retrieving games.

Furthermore, it would be beneficial if the puppy gets to know the car as a relaxing place. It is not only driving that is important, staying in the car should also be comfortable for the puppy. The breeder could lie with the puppies to have a nap in the car. When the puppies know the car, you can start the engine. When puppies do not react to it anymore, we can drive a little bit. The first time we are out driving with the puppies, it can be an advantage to bring along the mother dog, especially if the bitch is relaxed and feels safe in the car. Hopefully, the puppy will “learn” activity level from their mother (social learning). Depending on how many puppies are in a litter, one should only take some of them at one time.

It is also essential that the puppy gets to know different environments, strange objects, slippery floors etc. in the socialization period. The same rules as above apply here: the dog needs to be comfortable in most situations before you end the training session.

6.6. Familiarisation with other animals

Animals live in many institutions; in nursing homes, for instance, there are often birdcages, rabbits or cats. The sooner the dog gets to know other animals, the easier it will accept them as a “pack of comrades”. The contact should be initiated and moderated by humans. The puppy could, for example, play a retrieve game with a rabbit in the same room, or simply stay there calmly. Chasing other animals must be prevented, because the puppy would probably hunt them later.

6.7. The visit for a lifetime – the puppy moves in

For an optimal start together, you should have time for your new family member. It is in the first few weeks when you get to know each other. We recommend a minimum of three weeks of vacation in order to make this first intensive phase possible. During this time, your puppy gets to know you, the close environment and the first rules you establish. In this period, it is especially important that you give the pup a lot of body contact. The puppy needs the warmth and care from you to develop attachment to you. Attachment is very important for the dogs’ emotional development. After a few days, you can visit a well-organized puppy group with your puppy. Optimally, attention should be paid in the puppy group to the puppy learning respect for people. Pouncing is not accepted there either. We recommend that puppies should have contact with other dog owners in the puppy group. The puppies should alternately be held and caressed in the arms of other people. It is important that the puppy is given to other people to be held. They should learn that they are not given away

if they do not feel good about it. Various walking aids should be used as well. We recommend constant scanning and observation, even in such an environment, although the puppy would rather run around with its buddies. All of this develops your capacity to be able to guard your puppy's environment. For a future therapy companion dog, this is a must; (see illustration 6: Steps of socialisation).

Illustration 6: Steps of socialisation



6.8. How do we habituate the dog to the “work” setting

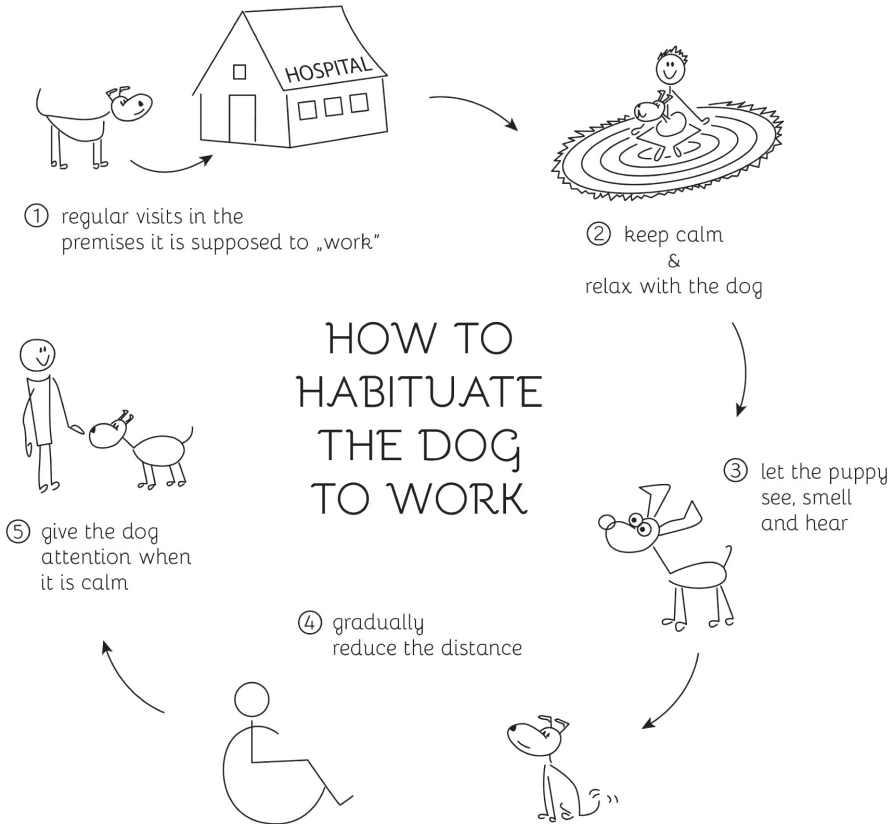
Now it would be good to give the puppy an idea of what his working life will look like. We strongly recommend taking the puppy at regular intervals to the premises they are supposed to “work” in. Initially, when you are there, the dog is not working. The puppy should get to know rooms, the smells and the atmosphere. You do nothing exciting but just stay there; you can explore the premises with your dog before it gets something to nibble. Later, the puppy will accompany you on your “visits” there. The best place for your puppy to explore the environment is on your arm. In the beginning you can sit down and relax together with the puppy. Be aware that no one is allowed to touch the puppy while it is relaxing on your arm. The first time you go there, just sitting and observing can be enough. Next time you can try walking around for some time and so on.

When we are habituating the puppy to its environment, we just sit down or walk slowly around. You let the puppy see, smell and hear: let the habituation happen. Be aware that the dog should never get frightened. If the puppy gets scared you have to start over again. After a while, you will see that the puppy is less occupied with looking around and starts to relax. Next time, you will probably see the puppy start to calm down much earlier. And after a while, it will need no familiarization at all, once the habituation has been completed. Now you can start doing things with the puppy, introduce it to new people and new activities.

The dog can get bored if you are repeating known activities in known places several times. Requiring unknown activities in unfamiliar places overwhelms the dog quickly. So there should be either new places or new activities or new humans, but not all at once.

And what do we do if the dog is reacting to the environment?

- Do not overreact
- Do not push the dog
- Expose the puppy/the dog as often as possible to this type of stimulus, in the beginning at a distance, then closer and closer, as the dog feels more and more secure in the presence of the stimulus
- Give the dog attention when it does not react; (see illustration 7: How to habituate the dog to work).

Illustration 7: How to habituate the dog to work

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Further Readings

- Feddersen-Petersen, D. (2014). *Hundepsychologie: Sozialverhalten und Wesen-Emotionen und Individualität*. Kosmos.
- Dogtail Videos (2014). *Von der Hand in die Welt – das A-Z des Hundes. Die Enzyklopädie rund um den Canis Lupus Familiaris – 8. Auflage (3 DVDs)*. Bad Münstereifel: Dogtail Videos.
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Chapter 7

Communication between humans and dogs

Prepared by Rainer Wohlfarth and Bettina Mutschler

Writing about communication with dogs will never be an easy task. Dogs' communication is so rich and colourful that it is hard for us to understand all the different shades of it. Scientists have up to now been focusing on wolves and wolf communication, but now there is more and more research on dogs, and especially on dog-human communication. For those of you that have special interest in the topic, there is a project going on in Hungary called "The family dog project" (familydogproject.elte.hu).

7.1. Communication

Communication comes from Latin "communicare" and means "to do something together, inform, stay in contact, to express oneself, transmission of information from a sender to a receiver and vice versa".

The word "communicare" consists of the following elements:

- "com" = together, with, side by side, close to each other, with each other
- "munia" = to commit oneself, to do a good job
- "uni(re)" = to unite, to harmonize sth
- "care" = to be kind, to care; (see illustration 8: Communication).

Illustration 8: Communication



7.2. Dog's expressive behaviour

By expressive behaviour we understand all forms of behaviour with informative function that are related to communication within a species and also between different species. In this case communication is a process in which the sender influences the behaviour of the receiver with the help of signals.

Dogs have a broad and subtly differentiated repertoire of signals. Optic and acoustic signals form a signal complex in which single parts can be more or less accentuated. Such a bunch of signal components is called in ethology “display”. This display constitutes a behaviour unit that forms a meaning unit in a communication system for sender and receiver. Displays are also called “general expression” or “expression frequency”, for a single signal can never transmit a certain meaning. In particular, displays in face expression and posture can lead to many different interpretations of behaviour. In such a way expressive behaviour proves to be an important indicator of the condition of the animal.

Communication: a mirror of a relationship

Mutual understanding is the foundation of a good relationship. Common understanding of information leads to comprehension and security in the relationship.

Mutual goals make communication important

Common goal-oriented behaviour requires communication within a social system. Depending on motivation, communication can have different significance. If the receiver does not understand the message of the sender, they cannot correctly act upon it. For human beings it means the following: if we do not give our dog unambiguous signals which it understands, it cannot follow us either mentally or physically. It influences the quality of communication. Communication should be desired by both parties and it has to make sense for both participants. Communication makes more sense within a relationship when it refers to common traceable goals.

If the activity does not make any sense for one of the two, it leads to one-sided interaction and the communication will suffer. The messages will be unimportant to the other party. Mutual actions and movements will be ineffective. But if cooperation between human and dog makes sense and is understandable, the dog will be able to better identify itself with the human and communication within the social system will acquire a high significance.

Forms of communication

Communication of a dog can be divided mainly into four different forms:

- olfactory (perception through the nose),
- acoustic (perception through the ears),
- visual (perception through the eyes),
- tactile (perception through touching).

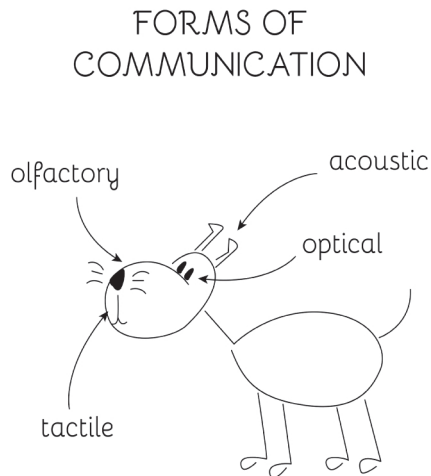
These four forms cannot be separated from each other. For instance, the marking activity of a dog is not only olfactory but also, in the presence of its social partners or pack of strangers, a visual signal.

Communication does not take place in a vacuum, and it is impossible to evaluate the communication without a context. If we are to understand the communication and signals of a dog, we need to know how the dog displays the behaviour, to whom and in what situation it shows it.

Olfactory communication

A dog's sense of smell is many times better than a human's. However, humans also communicate with each other on the base of smell in the form of "chemistry" in perfumes and other pleasant/unpleasant odours. You should try to see the world "through the dog's nose" in order to understand one's olfactory environment.

Exchange of information through special fragrances is called chemical communication. All substances that have intraspecific chemical signal functions are called pheromones. According to the function we can



differentiate, among others, sexual, detection and marking pheromones. Through sniffing, for example, at the anal-genital part of the body, it is possible to identify the social and sexual status of a fellow specimen.

Many dogs are very occupied with smelling and they like to sniff people's crotches. This is not a nice way to greet people and dogs participating in AAA should not do this. It can be very embarrassing for those who are not used to dogs, and for people that have experienced sexual abuse this kind of sniffing can be absolutely devastating. A lot of clients can smell of both urine and faeces, and it is very embarrassing if the dogs draw attention to it.

Marking

Marking is excreting or distributing (e.g. through pawing) urine, faeces or other scents from glands in order to accentuate a certain important point in the surroundings with a smell. Marking can have both social meaning within own group (internal) and territorial meaning for a pack of strangers (external).

A lot of people find dogs that mark cars, houses, fences etc. badly behaved. We do not want dogs participating in AAA to mark cars, flowerpots or the entry of an institution. The dogs have to be well rested before they enter the facilities and the owner needs to make sure that the dog does not mark inappropriate objects.

Marking for orientation

Marking can serve a dog's own orientation and has social (internal) communicative meaning. Through marking dogs find their way back home more efficiently. That is why we can often observe dogs marking an unknown territory. Through marking places where they were mating, they can find them later more easily.

Territorial marking

Marking can also serve to fill a territory with scents and in this way to signalize to a pack of strangers one's claim for the territory in question. Such communication has a territorial (external) meaning. This task is of crucial importance for the security of the whole pack. The relation between marking an area and emerging territorial conflicts is underestimated by many people.

Marking and Sexuality

It has been observed that before the start of the heat period of bitches, they tend to mark the territory more often. In order to create more security for the potential offspring, they show increased territoriality in this phase of the cycle. Thus a bitch pees far from the house not only to attract more males but also to create a security zone around its house. In this phase they can demonstrate increased territorial aggression towards other bitches or even strange puppies.

During the heat period marking is used to show males one's readiness for pairing. At the beginning of the heat period males show an increased tendency to mark the places marked by bitches. Shortly before the bitch is ready to mate, the male licks the bitch's urine.

Anal smelling

Anal smelling serves individual detection, as every individual gives off a personal smell through the anal glands. Smelling each other while greeting is important for communication between dogs. A dog that lifts its tail in order to let someone smell it, demonstrates social security. If a dog carries its tail down or even tucks it when greeting, it demonstrates social inhibitions. Nevertheless, there are bitches that in general do not like it when strange males smell them and signalize it either through sitting down, tucking its tail or in some other way.

Genital smelling

Like anal smelling, genital smelling serves the individual detection and control of the readiness for mating and can be understood as an invitation to mate. A bitch invites a male to copulation through smelling and licking its genital area. But if a bitch covers its own genital area with its tail while being greeted by a male, it means that it is not ready to mate at the moment. Tail tucking in this situation can be a sign of social insecurity, especially when the bitch did not have good experiences with other dogs in the past, was not respected by males, has a shy personality or is greeted by a hormonal male. A hormonal male is a male that can only display sexual behaviours towards females, no other social behaviours. Sometimes the bitch even snaps at the male.

Submissive urinating

A dog that lies on its back (ears flat, tail relaxed on the floor) and shows in such a way its submissiveness towards others, will be thoroughly smelled and even licked, because such body behaviour calls for additional attention among social partners. An ambivalent form of submissive greeting is urinating in a crouched position (ears flat, tail tucked). It presents both submissiveness and serious social insecurity. Especially when they are young, dogs can also urinate when their owner comes home or when greeting people it knows. When the puppy does this, try to ignore it and do not make a lot of fuss about it. This behaviour will most likely disappear when the puppy grows older if you do not get angry at the puppy when it urinates.

Defecating and urinating in fear or excitement

If the dog gets scared, it can let go of faeces. The faeces excreted in such a situation is very thin and the dog can even let go of it in movement as it allows faster escape.

Smelling and licking the ground, gnashing of teeth

This behaviour has different functions. Firstly, smelling the ground serves to control the area and in this respect takes place before marking. In strong excitement, for example, when a freshly marked place of the same-sex strange pack is detected, even gnashing of teeth can take place. Gnashing of teeth is connected with the vomeronasal organ which is mainly used to detect pheromones. Secondly, through smelling the ground males control sex pheromones in the urine of bitches in heat in order not to miss their readiness for mating. They lick urine and gnash their teeth.

A puppy's mother licks the urine and faeces of the puppy. She does it to remove the smell so that it is harder for strangers to recognize the pack.

Fragrance dissemination by wagging tail

Most people believe in the tale of a friendly dog that wags its tail. It is true there are dogs that display friendliness by tail wagging and do not have anything else on their minds. But there are also other dogs that are different. So what meaning does the tail wagging have? A dog with a normal body structure has a caudal gland 10 to 15 centimetres under the root of the tail. By wagging, the secretion of the gland is being spread in the air. The higher the tail is wagged, the bigger the amount of secretion will be released into the environment. Spreading the fragrance could be freely translated as: "smell me, for I am very important and I would like to have your attention!" Among the same species it means a socially secure behaviour with the following possible goals:

- to indicate a socially higher status,
- to dominate or to impress,
- to give the trespasser from a strange pack the first warning.

Wagging the tail low spreads less secretion. This expresses subordination. The tail under the belly, which is not wagging, means uncertainty: "Pay no attention to me, I would not like to be here at all." To complete the picture, it should be mentioned that the tail can also hang down absolutely

neutral and relaxed. Bitches in heat use tail wagging to spread not only the secretion of the caudal gland but also the smell of vaginal discharge.

In addition, the physical location of the tail also influences how the tail is carried. Dogs with a short crop tend to carry their tails higher than dogs with a very long crop.

Tracks of the soles of feet

The soles of feet are among the few places on the body at were a dog sweats. Thus soles spread the smell of a dog which, together with marking, serves the social orientation in the territory. The trespassers can also smell these soles and recognize that they are in a strange territory.

Acoustic communication

Compared to its ancestor the wolf, a dog barks both more often and diversely, which is often being seen as part of a dog's neoteny. There are differences in the type and manner of barking and clear differences in the communication function can also be identified.

Acoustic signals in the context of social communication play mainly a secondary role for the support and reinforcement of the primarily used visual signals. Among wolves, they also serve the transmission of information over larger distances, for example, to mark the area through pack howling.

During domestication the acoustic behaviour of our pet dogs, according to their function as service, hunting or watch dogs, has undergone massive selection changes.

Contact barking

Barking is also used to restore lost contact with social partners. Barking of this type has a very high and piercing sound and has two forms: whining barking that expresses uncertainty (a fear of separation) and the stereotypical

“whiffing” which could be heard almost always among dogs that do not suffer from separation fear but from loss of control. The latter can be also observed among dogs that invite somebody to play with them.

Fear barking

Anxiety affects barking as a combination of cry of pain and the above-mentioned “whiffing” and means: “Stop it, don’t do anything to me!” In addition, there is a kind of howling bark, known as a sound given during the hunt. However, it is questionable to what extent this sound still has a communicative meaning. Of course, this sound (like all sounds) differs depending on the breed type.

Howl

Howling has disappeared among many dog breeds through domestication. If it is pack present, it should be viewed from a different angle. This is a cry produced by the whole herd in a kind of social ecstasy. According to some interpretations, it is given out to collect the pack members before the hunt starts, howling could also have a territorial cause.

Yelp or whimper

This infantile behaviour is a call for attention and should elicit the attention of social partners. It can have very strong forms and could be ignored or even corrected by adult animals. For humans, it is completely logical to respond directly when a little baby starts to cry. However, if this child is three years old, is sitting in a shopping cart before the checkout and is roaring: “Mum, lolly!!!”, we find such behaviour undesirable and ignore or correct it.

Growl

This warning signal is to be understood within one's own herd as a warning or a possible correction. Domestic dogs can growl for resources such as food, bones or a place to lie to defend them against family members. They also growl as a warning against a pack of strangers before a territorial attack. The deeper the growl, the more secure the alerting dog feels in the given situation. A high growl is rather a weak growl. Adult dogs also play-growl, which can occur during positive interactions with humans, dogs, other animals or inanimate objects (e.g. toys), and it seems likely that the relaxation of natural selection triggered by domestication has affected the function of the vocalisation (Taylor et al. 2014).

Whine

High whining known from puppies' behaviour is an expression of discomfort. It may also be used to display agitation during active subordination, as an infantile behaviour that should attract the attention and care of seniors.

Pain screaming

Screaming caused by pain serves a social interaction within a group in order to stop the pain-causing stimulus. In case of an attack by a strange pack, the pain screaming is a cry for help that is directed to the pack members.

Gnashing of teeth

Gnashing of teeth can be caused by many factors. You have already learned that gnashing of teeth can be a display of excitement over strong olfactory stimulus, namely, if a spot is marked by a competitor or a bitch in heat. This happens with tense jaw muscles. In contrast, when gnashing of teeth

occurs in a different agitated condition, namely, in the state of uncertainty or fear, the jaw muscles are much looser. The lower jaw hangs more freely.

In addition, there is an in-the-air grab, in which gnashing of teeth is quite clear to hear. It is mainly shown by unsafe, fearful dogs as a defensive reaction, but it can also be perceived as offensive, threatening and warning. As always you have to evaluate the dog's behaviour in its entire context!

Blow

When hunting together, dogs blow, for example, in a mouse hole, which leads to a direct reaction by their pack comrades: they sniff at the same place. Sniffing, as such, triggers similar reactions.

Visual communication

Humans are very visually-oriented social mammals. It is well known that we mainly use body language to obtain an impression of the personality of an individual. The information conveyed with our body, as well as its forms and manifestations, determines how we perceive each other. The voice also plays an important role. The content of the speech, in contrast, is relatively insignificant.

Expressive movements of the face are called mimics, those of the rest of the body are referred to as gestures. Both serve the transmission of detailed information between dogs. Generally speaking, dogs may convey contrary intentions by using contrary body signals. It is absolutely necessary to consider the graduation of a signal in the situational context to make a precise decision about the meaning of individual signals.

Due to a large morphological variability, the signal structures of many dog breeds are indistinct in comparison to the relatively easy-to-describe expression of the wolves. As a result, the means of expression of the various breeds vary considerably. Limitations result from breed peculiarities, such as, among others, hanging ears, form of the face, movement-restricted or non-existent tails.

The social communication of the dog has been a subject of detailed research for at least last 20 years. Although not everything has been studied yet, it is known that body language is comprised of hundreds of signals. Those signals can be grouped as follows:

- agonistic behaviours (offensive and defensive)
- imposing behaviours
- stress, fear and de-escalation behaviours
- play behaviours
- passive submission
- behaviours connected with social contact

7.3. Dogs' body language

Before we get into details of the visual communication of the dog, we would like to stress once again that even if a lot of detail is described, the communication cannot be assessed without the context. In other words, this means: what behaviour, how, to whom and in what situation is the dog showing? A moving dog will show a certain posture in this movement and its facial expression usually accentuates it. Thus the division is established into two main groups which are described as follows:

- body posture and mimics,
- pace and movement.

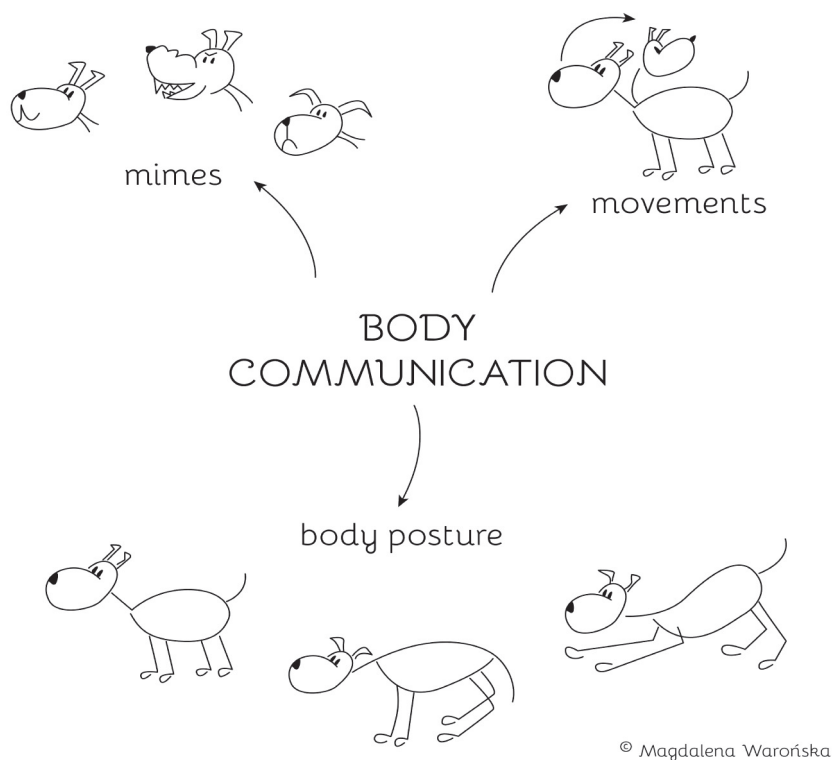
As we have already noted, the dog in motion takes a certain posture to communicate. This posture is also shown when the dog is not in motion. We would like to describe here different postures combined with facial expressions within certain behaviour areas; (see illustration 9: Body communication).

Neutral, relaxed posture

The dog stands on all four paws with its back straight and with loosely hanging tail. The head is held somewhat high with the nose slightly down. The ears are relaxed, pointing forward or moving in the direction of possible

sources of noise. The muscles in the entire body show low tonus (tension). The facial muscles are also relaxed, while the eyes of the dog express calmness. In motion you can see that the relaxed muscles in the entire body are still accentuated. The dog shows it in the trot or springy gait. This movement can be described as “flippant trot”.

Illustration 9: Body communication



Impressing posture

In this self-confident, “proud” upright posture, the head is carried high. The dog has its legs stiff, bent, and the tail slightly (not extremely) raised. It goes a bit stiffly and has a firm stand. Humans would name this position “macho posturing”. The facial expression is initially neutral and the snout is sloping

slightly downwards, the ears are directed forward. The dog can ignore its social partners when in this impressing posture, but observes them with its eyes. In this situation, the nose leans rather downward and the tail is raised higher. The dog has an increased muscle tone (tight muscles). Impressing is always a matter of self-presentation, which means that the impressing posture should not be the only form of impressing. Dogs may also show physical fitness or other skills through certain actions to impress the others. The impressing posture is not only a latent threat, but it is a form of expression of self-awareness and self-confidence in a social context. The dog wants to be noticed by its social environment and to be confirmed in his sense of self.

The imposing behaviours are very often connected with establishing which dog of the two is stronger.

Impressing and the other sex

To impress the opposite sex, the dog adopts an impressing posture. It makes biological sense that the choice of mate depends heavily on the fitness and superiority. Therefore, it makes a dog look bigger than he really is. We also see this in from humans. Men's qualities are also reinforced to impress: broad shoulders (protection and support), body size (therefore, upright posture), two stable legs to stand on (to mark the territory), the top two buttons of the shirt open (visible chest hair), full head of hair (or toupee as an expression of youthful dynamism) and well-developed muscles (defence resources). Women, in turn, try to impress men with the accentuation of the female body shapes, such as buttocks, hips (fertility), bust (source of milk), full head hair (expression of female hormones) and flat stomach (no offspring present).

T-Position

If a dog shows little respect to another impressing dog, the impressing dog will increase its effect to impress by encircling the other dog on stiff legs, which can no longer be ignored. This position is called the T-position and

will be mostly shown when it is necessary not only to show social status but also to defend resources: “No further movement in the direction of the food storage!” or “No movement towards my bitch!”

There are two T-positions. T-position number 1 is when a dog comes up to the shoulder of another dog. This might happen when a male is approaching a female in order to display courtship or when an aggressive dog approaches and threatens another dog. T-position number 2 is when one dog steps in front of another dog and stops it. The first dog is in this way able to control the movements of the other dog.

Furthermore, the T-position ensures security or shields from danger, as the dog looks in the direction of the potential threat. This is how the puppies’ mother shields them from other dogs. That, however, has nothing to do with the actual impressing, but rather with the parental role.

Dogs often get in the way of people to greet them. This can have both a social and, in relation to a stranger, a territorial meaning. Socially, it means a limitation of freedom of movement of a lower rank in a social status. The dog used to its high social status also finds appropriate respect in this way. It is not easy to approach it. Territorially, it means either: “No step further!” or something milder: “Remember, each of your steps is controlled by me.”

Offensive threatening

Sometimes impressing can gradually increase and even end in an attack. Before it gets that far, impressing turns into offensive threatening. It begins with a fixed, rigid gaze called staring. The tail is held higher and swings easily back and forth. The head leans forward, is lowered in the direction of the opponent, while fixation is reinforced. The neck and spine hair is raised high, the forehead is wrinkled, the nose is crinkled. The jaws remain pressed to each other, the front teeth may show in the corners of the mouth, as the front part is pulled up. In this phase, the tail oscillates no more, but extends horizontally, with a small crease at the top and is ready for a possible attack. Usually the dog is also growling.

Reaction in the territorial area

Responses to the territorial impressing or threatening own species can vary greatly. If the intruder is the one who is impressing, the reaction to this behaviour will most likely be one of impressive threatening. This can even lead to an attack, i.e. to expelling or disabling the opponent.

Reaction in the social field

Submissiveness can be both passive as well as active.

In contrast to impressing when the dog tries to look as big as possible, dogs show their submissiveness through making themselves as small as possible. This type of behaviour makes the dog a lot more infantile and helpless than it is and this “helplessness” is placating. This behaviour, described also as socio-positive or submissive signals, serves the purpose of minimizing the threat of higher-ranking species or achieving social integration. These include active and passive submission as well as playing.

However, it should be noted that submissive behaviour is always dependent on the tolerance level of the highest in the rank. Therefore, humiliating behaviour can only be used successfully, if the superior tolerates it. The more tolerant and friendly social partner’s reaction to the submissive gestures is, the more actively submission is shown.

Recent dog studies (Joanne van der Borg) separate postures from behaviours by describing the so-called ‘formal dominance’ of dogs. The research shows that dominance is strictly connected with age, therefore, the older the individual, the more dominant it becomes in its social group.

Being dominant, however, does not have anything to do with “winning” or “losing” in a social context, i.e. a dog may be dominant but still controlled by a submissive individual.

Passive submission

When displaying passive submission, the dog rolls over on its back back and lifts one or both front paws to chest, pressing the paws close to the body. It remains motionless with ears flat to the rear. This makes its scalp tight. The eyes are often pinched to avoid eye contact with its opponent. The lips are withdrawn, which looks like a “grin”. The genital area is exposed, it will even often pee. This behaviour has its origin in the dog’s “baby behaviour”, where the mother dog rolls the puppy on its back and licks its genital and anal area with the tongue (dominant, parental caring act). This leads to the following conclusion: appeasement through initiation of caring acts.

Eye contact

Eye contact has communicative importance not only among humans but also among dogs. In the refined communication of dogs, a quick look at the other dog is often enough to intimidate or even to correct. In return, a direct look away from the eye contact with the other dog is enough to appease, to avoid confrontation or to express one’s own lower rank. If a human looks away, it is perceived as shyness and thus also as caution.

Between man and dog: looking away can be understood as ignoring and means then: “You do not mean anything to me.” This is shown by looking away or even by pointedly turning away from the other. Looking away can be also understood as a stress signal, i.e. “I do not have the courage to look at you for a long time, I am afraid of you.”

Among dogs: long-lasting eye contact is more likely to fix on the other dog, this can even have a literal impact, namely, to stop the other dog. Thus longer fixation will constantly increase the threat. However, great anxiety is also fixed in the direction of the potential danger. The dog constantly keeps an eye on the threat. Here it would also like to discontinue the threat and stop it in its position. (“Do not come too close to me, please!”)

Among people: A glimpse from a stranger is registered when it lasts about three seconds. A glimpse that lasts a little longer than three seconds is understood as a signal of clear interest. The other man starts to ask himself, “What does he want from me?” That is why it plays a crucial role in flirting. If a glimpse lasts much longer, it is understood as threatening, at least, at a short physical distance. Any human should be aware of this effect also in relation to dogs.

Kikusui et al found in 2008 that owner-dog bonding is comparable to parent-child bonding. The researchers found that when owner and their dogs gazed into one another’s eyes during a 30-minute period, levels of oxytocin (measured in their urine) increased for both humans and dogs. Kikusui said he believed the gaze was acquired by dogs as part of their efforts to communicate and to form social bonds with humans.

Misunderstood eye contact

Unfortunately, shy dogs are those that are often being unconsciously threatened by people through gazing, talking and caressing. Although people want to communicate: “You do not have to be afraid of me, I will do you no harm”, the dog feels even more threatened, as the person has actually done something. The person has not respected dog’s signals and the dog feels that its body is disregarded and, therefore, feels at risk.

People often teach dogs to look at them and not to pay attention to the surrounding. This can lead to problems. First of all, an inexperienced trainer may not notice when the look of the dog changes into a threat while training and may thus be attacked by the dog. On the other hand, when people demand that unconfident dogs do not pay attention to anything else but the human, the dog’s insecurity grows because it is not able to look around and make sure there is no danger in the environment. Such a situation may lead to numerous problematic behaviours, such as aggression on the leash, for instance.

Eye contact between the two parties is also used to draw the attention of the other (for example, it can be an invitation to play) or to send it in a certain direction in order to fulfil a specific task (e.g. in such a way the bitch

sends the male in the direction of an intruder). It is just the same among humans: the more mature the relationship is, the more often one glance is sufficient to be well informed. Between close dog friends a longer, relaxed look does not mean fixing. It rather tends to be a loving, intimate eye-contact.

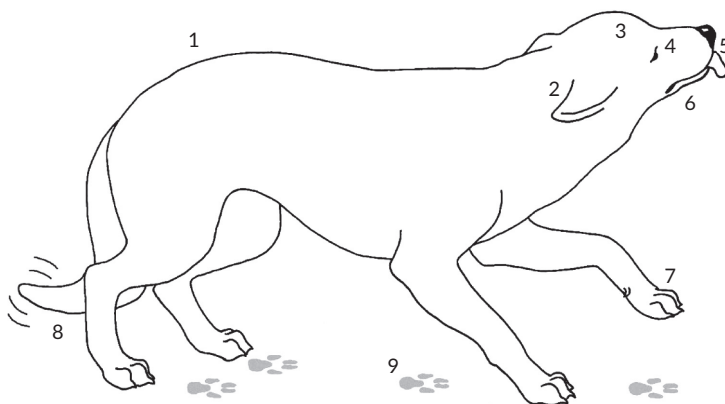
Active submission

In contrast to passive submission, this form of subjection comes from active begging for food by young puppies. The more actively a puppy begs for food, the greater his chances of survival are. However, it is worth noting the following: the puppies that are very pushy for food have a great difficulty to stay still in the situation of parental caressing behaviour. In such a way the differences between puppies develop from the very beginning. As the puppies that beg for food grow faster and are usually generally more active, they will soon play a dominant role among their brothers and sisters by squeezing, for example, continuously between the others at the “milk bar” crowd. Initially, the mother dog will not only allow but even positively encourage such behaviour. The “little cheeky monkey” gets the most attention from the mother and other adults.

As already mentioned, the active submission of begging-for-food behaviour develops accordingly: in a crouched position with protruding or adjacent ears and upward directed muzzle, the dog makes the same nudging movements as if it was drinking at the teat. In these nudging movements, mouth corners are often being licked. The dog wags intensively with its whole body, holds the tail low and also urinates from time to time. While it remains in a crouched position, it can alternate movements of its left or right front paws. Pay attention to the following: this kind of “pawing” shows a crouched paw in contrast to the “raised stretched out paw gesture” with stretched limbs that has a rather challenging or inviting character.

Due to the difference in size, a dog can even paw the body of a human, climbing. This, in turn, should not be confused with the high jump with stiff limbs, the body in this case expressing no submissiveness but rather social superiority or territorial threat. Depending on the possible social tensions, reaction to active subordination can vary. If the mood is positive

in a socially stable group, this behaviour tends to be tolerated. In the situation of social confusion, the strong submission is often “acknowledged” with an over-the-muzzle bite. In contrast to preventing choking with feed due to begging behaviour, it is said here: “I have no food for you, leave me alone!” Thus respect is established again and the active subordination converts mostly into the already described passive submission.



Submissiv

- 1 – body crouched
- 2 – ears put back
- 3 – smooth skin on forehead
- 4 – short, indirect view
- 5 – lick face of a dominant dog, or licking into space
- 6 – corner of mouth pulled back
- 7 – paw raised
- 8 – tail lowered (can wag a bit)
- 9 – perhaps sweating paws

Important

Active submission can later even develop into an intensively dominant behaviour. For example, the Alpha-she-wolf shows this behaviour towards Alpha males or even those lower in rank, when they come back from the hunt, while she stayed with the puppy. If the food has not been brought, the she-wolf might send the other wolf again for the search. If the food is

brought, the supplier will be told that it will get nothing. Even if begging-for-food behaviour of the Alpha-she-wolf may seem submissive, it should be rather evaluated as a serious claim. As you can see, submissive behaviour can be very dominant. Only the overall context can show how a particular behaviour is to be evaluated.

Recent studies (Joanne van der Borg et al.) separate behaviours from postures. Postures can be dominant but still the individual may “lose” in the social context. Submissive behaviour is not dominant. However, it can be seen as a form of dominance in some cases, like a woman crying to get what she wants.

If active submission is really meant to be subordination, the do-good behaviour will be shown at a distance from the other, without direct physical contact. This restrained shape shows more respect for the body and the personality of the other individual.

When an adult dog shows clear signals of active submission towards people, it most often shows its insecurity towards humans. Such a dog is not a social dog, it is a dog that is afraid of people and should not be working as an AAA dog.

“Play”

Play contains components of agonistic, hunting and sexual behaviours, but without a recognizable context and with incomplete sequences. In general, such behaviour is characterized by excessive expressivity: game signals are shown without significant gradation at great to maximum intensity. They are displayed dynamically and with repetitions.

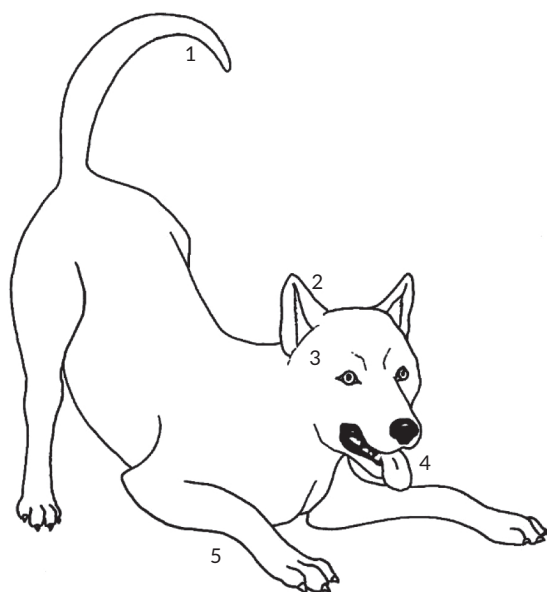
Typically, exaggerated mimics are rapidly changing. The so-called play face will be often shown as an invitation to the game. This is characterized by erect ears, retracted lips, as well as a direct glimpse in the direction of the social partners, while the body does not recognize any threatening signals. Besides, dogs often display a high wagging tail and a typical playful posture of the front body part (“play bow”) and a fling of the head. With the front body in a low posture, the dog is approaching in the form of attack, while it presses the foreparts to the ground in front of the partner

with rear end in an upright position. Then a sudden leap is made in the direction of the social partner. In playful attack threats, in contrast to the actual threats, there is no tension of muscles or hair bristling; besides, the tail hangs loosely down.

Playing can also serve as a substitute behaviour if the given situation is perceived as conflict resolution. In such a way an animal tries to substitute the conflict situation with an action that offers more security.

Two adult dogs play together very rarely. Play is characterized by mutual balance, i.e. each individual is able to stop the other, each displays the same level of rivalry etc.

The bow can be (and most often is!) an imposing behaviour directed at the other dog in order to displace it/control it. It can happen just before the attack. The bow is the most frequently misunderstood dog's behaviour.



Play invitation

- 1 – tail carried gaily – strong tailwaging is possible
- 2 – ears erect
- 3 – pupils widened
- 4 – mouth open, tongue visible
- 5 – front part lowered

Fear

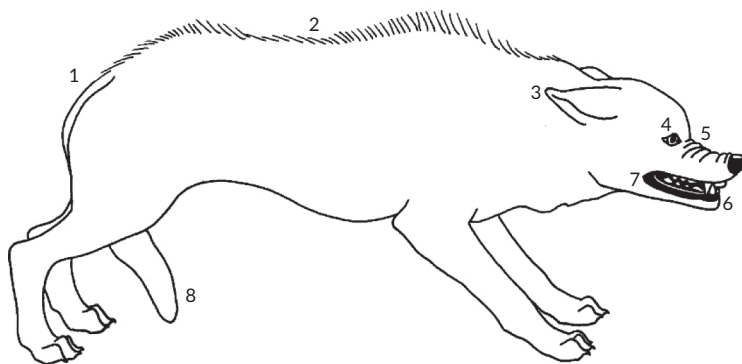
If the dog's uncertainty increases, it can make defensive movements with its head. The head oscillates to the left and to the right to demonstrate that the dog does not want any confrontation. Nevertheless, it keeps an eye on the potential danger. The lips are more drawn to the rear. Forehead and nose are stretched. The ears are also pointing backwards and lie on its head. As a result, the eyes narrow to slits. Its readiness to flee increases. As long as the possibility of escape is given, the anxious dog will avoid confrontation with the threat. If there is no possibility to escape, it will be forced to defend its body. As a preliminary stage to an aggressive confrontation, the dog shows its defensive threatening behaviour.

Defensive threat

The dog makes itself even smaller, the tail is pulled under the belly, and the spine hair can stand high (piloerection). In defensive threat the jaws of the dog are farther apart and one can see the whole set of teeth. The tongue can move in and out of the mouth, while the jaws rattle against each other. The produced sounds vary from the muted high pitched growl through high growl barking to pain cry or whimpering. The dog can also pee or even defecate of fear (preparation for flight).

Fear aggression

If threat does not decrease, it can trigger attack (fear aggression). The dog pushes snapping to the front and pulls immediately back again, possibly several times in a row. Such attacks are always directed at the head and neck area of the opponent. Due to the difference in size, people are more frequently attacked at the abdomen, arm or shoulder. Dogs that have repeatedly had the experience that the threat decreases following attacks, in similar situations will develop a faster fear aggression in the form of attacks or even skip different stages, as described above ("attack is the best defence").



Defence threaten

- 1 – body crouched
- 2 – hair ruffled
- 3 – ears put back
- 4 – pupils widened
- 5 – bridge of nose pleated
- 6 – lips slightly lifted
- 7 – corner of mouth retracted
- 8 – tail between legs

Tactile communication

Tactile communication plays a major role in the establishment of ties in the wolf pack and contributes to group cohesion. By social grooming (grooming), lying together, nose rubbing and “going in pairs” of the paired wolves, cooperative relations are maintained. Dogs are also used to such tactile signals, however, only among animals that know each other very well. It is shown in mutual licking the muzzle area and the corners of the mouth and throat, in greeting, “active submission” or social play. Licking or prodding people submissively will be shown in the context of active submission.

Licking the muzzle can also be an imposing behaviour, whereby one dog can control the other.

Physical contact has always a communicative meaning. It strengthens the relationship and gives a feeling of familiarity and togetherness. That

is why, physical contact with your own dog is extremely important. In humans and animals which are not in a relationship with each other, physical contact is usually more threatening. Not every dog likes to be petted by a complete stranger. Of course, there are also dogs that enjoy being stroked by strangers. They run playfully at a person and look for physical contact, even literally pushing that person. These dogs have little respect for our human intimacy.

Hug is a signal that is often misunderstood in dog communication. When two dogs hug each other, it is not because they “love” each other. Hug in dog communication is an aggressive behaviour, it is displayed in a fight, even though there may be no growling involved.

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Chapter 8

Stress, causes, signs and consequences

Prepared by Rainer Wohlfarth and Bettina Mutschler

8.1. Dogs have emotions

It has been proven that dogs have emotions; they can, for example, feel anxiety or joy. These emotions are spontaneously triggered by negative or positive signals or situations. Emotions do not emerge because the dog consciously thinks about them. Emotions are always something absolutely personal and individual, because not only external factors are involved in their development, but also some internal factors, such as physical condition, personal experience and genetic predisposition, play a big role.

Emotions are mental and physical reactions in the brain which are triggered by the perception of a signal. For example, the appearance of another dog can be such a signal. Next, the following sequence occurs in the dog's brain: "known-mate-cute-go-sniff" or perhaps "unknown-enemy? – dangerous-run away-stress-growl."

The ability to produce emotions has developed during evolution many million years ago. Emotions play an extremely important role in the process of decision making. No vertebrate is able to survive if it has no emotions or is "emotionally flat". Generally, every living creature always tries to optimise its condition, and emotions are necessary to achieve this goal. If a dog feels

fear or joy, the dog's brain evaluates this environmental signal in a certain way, for example, as "enemy = negative" or "feed = positive". Then the brain can start a "plan of action" to design the best strategic behaviour in a certain situation, for example: "run away" or "go there and eat". The dog subjectively chooses a behaviour that can optimize its condition in the best way in a given moment. Basically, it does not matter for the dog whether others, including its owner, like or accept such a behaviour.

8.2. From emotion to disease

It is a long way from emotion to disease, but we now know that chronic stress can lead to diseases. The interface between body and soul is regulated by the vegetative (or autonomic) nervous system that governs all the functions which try to escape our control. Every human feeling is coupled with typical vegetative reactions, for example, fear – with heart palpitations, acceleration of breath, sweating and pallor. The influence of the sympathetic and parasympathetic nervous system on the target organs leads to their over- or under- functioning, increased or decreased secretion and vasodilation or vasoconstriction. It is understandable that a long-lasting emotional impact leads to disorders in the functions of respective organs. Therefore, stress-related diseases manifest themselves especially on those organs that are regulated by the vegetative nervous system, such as:

- the cardiovascular system,
- the respiratory system,
- the gastro-intestinal tract,
- the urogenital tract,
- the endocrine system, as well as
- the skin.

Emotions are coupled with vegetative changes; everybody knows this from their own experience, for example, increase in blood pressure in excitement or flushing with anger. These changes usually cease when the respective feeling comes to an end. Such short-term feelings do not generally

have a pathogenic influence. This only comes into play when the organism has been already damaged, an acute trauma took place or the feeling led to a chronic emotional arousal.

8.3. A short history of stress research

The theoretical concepts of stress phenomenon originate directly from Cannon. He developed the concept of maintaining the internal environment, came up with the concept of homeostasis and named the disturbing influences for the first time as stress. He was the first to recognize the importance of catecholamines for the reaction of the organism in the sense of an emergency response (fight or flight). Selye (1956) extended this concept, having also included the longer-term physical changes caused by sustained stress levels. He defined the general “adaptation syndrome”, which is a non-specific response to various stressors. An “alarm phase” is followed by a phase of “resistance”, which turns into the phase of “exhaustion”. He describes basic biochemical processes with the function of the hypothalamic-pituitary-adrenal axis. In 1974, in order to distinguish between negative and positive stress, he introduced the terms “distress” and “eustress”. In 1966 Lazarus brought in a new perspective in stress research and proved that subjective evaluation of the situation was crucial for the stress response of an individual (Lazarus, 1966). Since the individual has the opportunity to respond to external and internal requirements with his behaviour, neither the situation nor the person himself is the cause of psychical stress, even though he is dependent on both. Mental stress arises rather from the way a person evaluates his adaptive abilities.

8.4. Dogs and stress

In our hectic time it is impossible to exclude the word “stress” from our language. Who did not sweat before the first date or did not have a dry mouth before a test? But what about our four-legged friends? Are they also stressed, for example, before exams, and what effect does stress have on the behaviour and hormone physiology of animals?

It is becoming increasingly clear that dogs possess a number of common “social tools” that have the same neurological and hormonal substrates for social behaviour and, in particular, similar mechanisms of stress reduction.

Vertebrates have largely a similar “social network” in the fore- and mid-brain, which controls their behaviour. These brain structures are involved in social behaviour, stress management and group orientation. The limbic system is the basis for emotions, such as fear, joy, dread, anger, lust or caring in all mammals.

All vertebrates have two different, simultaneously functioning types of systems for physiological coping with challenges, which, in turn, are strongly bound to certain brain systems.

Stress refers to the effect of physical, physiological or emotional factors (stressors) that cause a change in the homeostasis or the “adaptive states” of the animal. The overt or covert response of an animal to a stressor can be considered as “adaptive”. This “adaptation response” is needed to return to the baseline of behaviour and of the physiological state. The response to stress often involves changes in the neuroendocrinologic function, the autonomic nervous system, the mental state of the animal and its behaviour (Rensing, et al., 2006).

8.5. What happens in stress?

Each response to a psychological stressor begins with a non-specific activation of cortical and limbic brain structures, because stimulation of the central and peripheral noradrenergic system leads to the so-called “arousal” or, according to Seyle (2013) the alarm reaction. This reaction is triggered by the vegetative nervous system which cannot be mentally controlled.

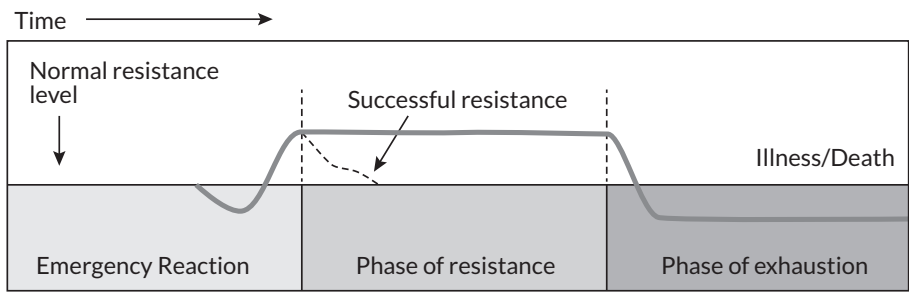
First, special messages are sent from the hypothalamus to the pituitary gland. A specific hormone will be released there, which in turn stimulates the cortex of the adrenal gland and this causes discharge of the stress hormone, cortisol. Cortisol affects almost all cells of the body, concentrates our attention and tunes the body into “fight or flight” mode.

Parallel to this, the so-called sympathetic nervous system begins to act. This is an element of the nervous system that tunes the body into active

position; it is usually said that an “alarm reaction” is triggered. This is caused by the release of adrenaline from the adrenal medulla through the sympathetic nervous system and is associated with increase of the heart rate and blood pressure.

According to Selye (2013), a stress state should be understood as a special syndrome, which consists of non-specific changes within a biological system. Selye describes the General Adaptation Syndrome (GAS). The stress response of the GAS consists of three phases: alarm reaction, resistance phase and exhaustion phase; (see illustration 10: Stress vs. General Adaptation Syndrome).

Illustration 10: Stress vs. General Adaptation Syndrome



The alarm reaction

The alarm reaction includes the above described physiological changes that the organism shows as the first response to stress provocation. It consists of various complex physiological and biochemical changes, which usually have the same general characteristics, independent of the specifics of the stressor. The control mechanism (fight or flight) triggered by the body in the alarm reaction is vital. Activation of the adrenal medulla via the sympathetic nervous system leads to the secretion of the hormones noradrenaline and adrenaline.

The alarm reaction ends with an imbalance of the internal equilibrium (shock – antishock). The sympathetic nervous system is activated and this leads to the following:

- dilation of pupils and reduced secretion of saliva
- bronchial expansion
- goose bumps as a result of skin vessels contraction
- increased skin conductance and increased heart rate
- narrowing of blood vessels
- slow gastro intestinal peristalsis and slow urination.

The adrenal medulla is activated. It contains catecholamines, noradrenaline and adrenaline hormones. The release of noradrenaline leads to:

- blood pressure increase by vasoconstriction
- lipolysis (release of fatty acids and fat stores)
- vein constriction, skin and guts constriction
- bronchial dilatation (widening of the bronchi)

The Adrenalin secretion leads to:

- blood sugar increase (BS increase) due to degradation of glycogen from the liver stores
- EEG-desynchronization, i.e. a-blockade and rapid b-waves.
- increased blood circulation in muscles
- increase in heart rate

In case of long-lasting stress; cortisol is released from the adrenal cortex and growth hormone – from the pituitary gland, which affect carbohydrate and fat metabolism. The result is a high blood sugar level and acidity in the blood. In the alarm phase we can see an improvement in the blood flow to the muscles, heart and brain (supports thinking processes). Besides, through increased O_2 transport, ventilation (of the lungs) is improved.

As soon as solutions are found to this non-specific activation, neuronal circuits involved in this behavioural response expire.

Phase of resistance

If it is impossible to find a solution of one's own, the so-called uncontrollable stress reaction occurs. This is marked by a long-lasting activation of cortical and limbic structures as well as the central and peripheral noradrenergic systems, so that finally also leads to the activation of the HPA-system (hypothalamo-hypophyseal-adrenocortical system) with a massive and long-lasting stimulation of cortisol by the adrenal cortex.

The aim of this sequence of hormones and the activation of the autonomic nervous system is, among other things, to adjust the body to new situations. During the stress response cortisol plays a protective role for the organism, especially in the acute stress response. Within 20 minutes after the start of cortisol effect, there occurs activation of all systems in order to focus on combat and/or escape. This arousal effect includes a centralization of circulation, a direct effect on muscles and an activation of the immune system.

Resistance

In this phase the adaptive responses achieve their optimal level. If the stress persists longer, antiregulatory effect of the parasympathetic nervous system occurs. This means that the sympathetic dominance is weakened. However, hormone secretion of hypophysis remains high, maintaining A, NA and cortisol release high. As a result of weakening of the thyroid and sexual function, the menstrual cycle is disturbed. Due to the increased aldosterone release in the NNR, vasoconstriction and inflammatory processes intensify. Measurement of stress effects takes place via control of the catecholamines NA and A in the urine as well as control of blood glucose and blood fats in blood.

The presence of Glucocorticoid receptors in the brain has shown that the brain is not only the starting point, but also an important target organ of the stress response. Which of these mechanisms is activated in stress and what are the resulting long-term changes, depends on the type of load

and its evaluation by the person. In a controlled stress response which can be solved, although not routinely, it is advisable to speak of a challenge.

Ongoing activation of the HPA-axis and long-term elevated circulating level of glucocorticoid occur, when stress develops in an uncontrollable manner. In experiments with animals observed in such conditions, this phenomenon is called “behavioural inhibition”. The repeated confrontation with various uncontrollable stressors leads to a state of learned helplessness and serves as an animal model for stress-induced diseases.

The initial feeling for both types of reaction to stress is the feeling of fear. The stressors in the central nervous system enable serotonin turnover and, thus, the system, at the same time, shows anxiogenic and anxiolytic effects. Serotonin plays a central role in the “fear learning” and “fear recalling”.

Phase of exhaustion

The adaptive capacity is lost in case of exhaustion. Problems with energy supply (glucose and muscle power), i.e. adaptation problems, occur. Growth, processes of reproduction and the immune system will no longer work. If the stock of adrenal cortex is emptied, GAS can no longer control the stress. The enlargement of the adrenal cortex, shrinkage of the thymus gland, formation of ulcers, disturbances in the area of weight loss and psychosomatic disorders are observed. Long-term effects include actual diseases, such as hypertension, cardiovascular-renal disease, inflammation and allergies. GAS is a stereotype-hormonal pattern that runs independently of the type of irritation at each intensive stimulus action.

According to Selye, there are two possibilities for the emergence of diseases associated with GAS:

- Damage caused by lack of adaptation (stress ulcers)
- Damage caused by excessive adaptation reactions (hypertension)

The alarm phase is characterized by over-activation and the resistance phase for typical psychosomatic diseases such as skin diseases, hypertension, ulcers, etc. The exhaustion phase is associated with susceptibility to infections, premature ageing, retreat, fatigue and anxiety.

Stress is not harmful per se

Without stress there would be no life and no success. Stress is necessary to keep the body functioning; a healthy level of stress boosts physical and mental performance. Another feature of acute stress is control of the dangerous environment, active engagement with it and thus removal of burden. Stress induces adaptive mechanisms and thus increases mental and physical motivation – but only up to a certain point. This point is for each individual variable and depends on genetic factors, personal experience and behaviour. If the intensity and duration of stress exceed the adaptive mechanisms of an individual, Eustress performance degrades into (psycho)-pathogenic distress, which puts at risk homeostasis or physical and emotional equilibrium.

Dogs can cope with most situations, especially when they receive support from people who provide relaxation and security. After an appropriate recovery period the animal returns again to its initial state.

“Positive” stress: short-term, manageable situation/stimulus that leads to an optimal responsiveness and optimal physical performance capacity through the increased supply of energy to the body; increased concentration and attention

“Negative” stress: short-term situation, which is evaluated as challengeable or causing extreme fear; the animal is incapable of adapting itself to an altered environment or to the changed internal stimuli or chronic stress: long-lasting over-irritation by stressors. Attention: too much positive stress can also be negative!

In chronic stress individual responses even to mild stressors trigger a stress reaction and more stimuli will be perceived as stressors (generalization).

8.6. What are stressors?

From the very outset dogs live in a completely unnatural world, especially those who live in cities. If humans – first the breeder, then the owner – failed to carefully habituate the dog to all the situations of later life (keyword: socialization) in the first months, the dog will inevitably live in constant stress. Other things that can stress our dogs include, for example, noise, hard training, little rest, frequent racing, ball games, excessive requirements (through training, humanization etc.), hours of loneliness, excitement at dog sports, too many or no rules in everyday life, etc. This list is only a small selection and can be individually extended.

Note: dogs feel the rush, anger and aggression in their environment very precisely. They will be affected by mood transmission, even if they are not directly involved. Dogs keep individual distance the same way people do. The shortfall of individual distance, especially among strangers, is uncomfortable for the dog. It can cause stress-related symptoms, for example, in a crowded underground, at vet clinic or at dog shows.

Dogs in AAA will face possible stress factors in all their activities. The most stressing activity for a normal dog will be staying close to strangers, being hugged and kissed etc. A lot of dogs find this difficult; that is why one of the criteria when we evaluate dogs' suitability for this activity is if they are comfortable with people around them. Dogs, similarly to humans, have personal zones and intimate zones that they wish to protect. The space in the intimate zone is reserved only for the most trusted and loved ones in our social circles: partners and siblings. It does not mean that we are offended by a friend's hug, it is just going to be brief and less intimate. We need to select dogs with very small intimate zones for work in AAA. It is also important that the owner of the dog read the dog's signals. Although each dog is unique, some of the more common dog-related signals concerning personal territory include head turning, turning away, averting eye contact, squinting or blinking eyes, shaking, grooming etc. (see appeasement signals further on). Often humans do not recognize these signals or they misinterpret them as disinterest or disobedience; yet each signal is part of the ongoing communication dogs might be trying to convey about personal territory.

The individual sense of personal space is constructed and monitored by the amygdala, the region of the brain involved in fear reaction. When dogs' apprehensions are not acknowledged and addressed, those fears can escalate into behaviours that look like aggression to humans. Dogs might use barks and growls to convey fear. "You are too close and I am afraid. Move away!" This is a behaviour that we cannot tolerate in AAA, so it is very important that the dog is tested mentally and that their owners are educated well in recognizing appeasement signals. The personal and intimate zones are not fully developed before the dog reaches maturity. That is why, we do not recommend testing dogs for suitability in AAA (mental test) too early. This will vary from big to small dogs, and from one dog to another. Most big dogs reach adulthood when they are between 2 and 3 years of age, small dogs – when they are between 1 and 1 ½.

Causes of stress (examples)

- genetic predisposition: higher or lower tolerance to stress
- prenatally: increased release of stress hormones by the mother
- the size of the group in relation to the space & resources
- population density in relation to available territories & resources
- trespassing of the intimate zone
- lack of exemplary behaviour by the older generation
- lack of leadership/social deficit: the existential fear, "manager stress".
- complex environment (noise, unrest, etc.)
- too high expectations from the dog (social, exhibitions, dog's sport)
- pressure from education (use of wrong methods)
- health problems, visits at the vet's
- increase in the number of family members, serious family disputes or divorces
- being in shelter
- change of ownership
- loss of social partners
- trauma
- frustration (lack of needs satisfaction)

Stress is individual

Brain researchers have found that stress is the result of our life perception, as individuals experience stress very differently. What for one person is stress, for the other one is daily

life routine. The evaluation of the situation by the affected individual is crucial.

The stress response of the animal may vary and depend on its previous experiences, gender, age, genetic profile and its physical and mental state.

Chronic Stress

Chronic stress is often characterized by a sum of various factors.

Chronic stress can be characterized as follows:

“Chronic stress, including chronic anxiety and psychosocial stressors, generates a condition called allostatic load, in which the body is under pressure through the persistent activation of the same physiological systems that normally cope with stressors.”

Dogs face various kinds of situations that have challengeable or irritative character. This information is processed by the brain, whereas the processing mode depends on genetic dispositions, experiences, status, gender and other factors.

Depending on the result of the stimulus processing, different reactions are observed: if the stimulus is not perceived as a threat or is assessed as known and safe, there will be no significant physiological stress response. It is different in situations which are unknown, difficult to control and unsafe. Three possible reactions (responses) can be distinguished:

- No reaction of coping with the situation available. This leads to fear and helplessness.
- Failed reaction of coping with the situation (experiment) that can lead to aggression, anxiety and increased vigilance.

- Reaction of coping with the situation with a high energetic, psychophysiological effort. This can lead to increased vigilance, anxiety and fatigue.

All three reactions (responses) have physiological accompanying reactions, which, in turn, increase the burden factor. Physiological and pathophysiological mechanisms can be observed at several levels.

At the level of the central nervous system it can cause chronic anxiety, hyperexcitability, but also depressive behaviour. The cognitive functions are usually significantly restricted, therefore, learning is hardly possible. On the neuroendocrine level we can see chronic skin toning. Altered responses of the immune system can result in obesity in the area of fat and connective tissue, as well as in diabetes and hypertension. On the other hand, pathological changes can also occur in other body systems. The allostatic burden (see above) leads to a “non-physiological” continuous impact on the body with pathophysiological changes in different organ systems.



Stress and communication

The individual is focused on self-preservation, which disturbs the possibility of contact (inward or outward). Learned information cannot be retrieved. Importance of new information is not recognized. The social learning process is blocked. Strong social influence very often increases stress because it is perceived as disturbance of concentration.

8.7. Signs of stress

Screaming, whimpering and fear cries are characteristic for stressful situations. Behavioural changes give a hint of stressful situation (such as striking, restlessness, passivity). Changes in the rhythm of activities (e.g. apathy) and eating habits (e.g. loss of appetite, “eating attacks”, eating stones or inappropriate objects) can also be indicators of a dog’s stress.

How can I see that the dog is stressed?

Here is a list of the most common behavioural problems:

Short-term signs of stress

- Increased display of appeasement signals such as:
 - Yawning
 - Head/body turned away
 - Nose licking, lip licking
 - Sniffing
 - Paw lifting
 - Play bow
 - Blinking
 - Slacking or exposing the teeth (“smiling”)
 - Freezing
 - Shaking
 - Drooling
 - Whale Eye
 - Scratching
 - Sneezing
 - Panting
- Muscle tension, closed mouth, pulled back opened mouth, frown, position of the inner corner of the eye, wrinkles around the eyes and around the edge of the jaw
- Excessive personal hygiene: self-nibbling, licking
- Far protruded tongue with rolled edges
- Wide open eyes, wide dilated pupils – fixation

- Excessive vocalizations: bark, yelp
- Biting at the leash
- Protruding hair on the head, around the nose, put up fur on the neck, shoulders and over the back
- Urinating and defecating
- Pulling out the penis
- Hectic to grab
- Increased production of dandruff



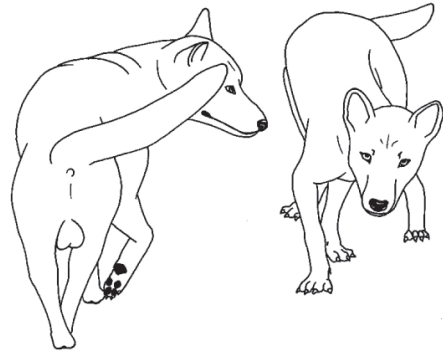
Chronic signs of stress include:

- Hyper-sexuality – no interest in altered oestrous cycle of the bitch
- Destroying objects
- Sensitivity to touch, shyness
- Sound sensitivity, anxiety
- Restless movements, unwillingness to move
- Panting, shaking, sweaty paws, dripping nose, bulbs on lips
- Disorders of the gastro-intestinal tract, loss of appetite, eating attacks
- Pale gums
- Hair loss, poor condition of skin and fur
- Unpleasant body and mouth smell, allergies, unhealthy appearance
- Changes in fur texture and colour
- Asymmetrical postures and/ or condition of muscles
- Changing eye colour, red conjunctiva of the eye
- Stereotypies, such as tail chasing

Head/body turned away

8.8. Reduction and prevention of stress

Not stress itself but the prevention of stress should be given attention to, because not every burden results in a stress syndrome. The two stress responses, the alarm reaction and the General Adjusting Syndrome, are connected with the two ways of coping with the situation:



1. "Active" confrontation and control of the situation

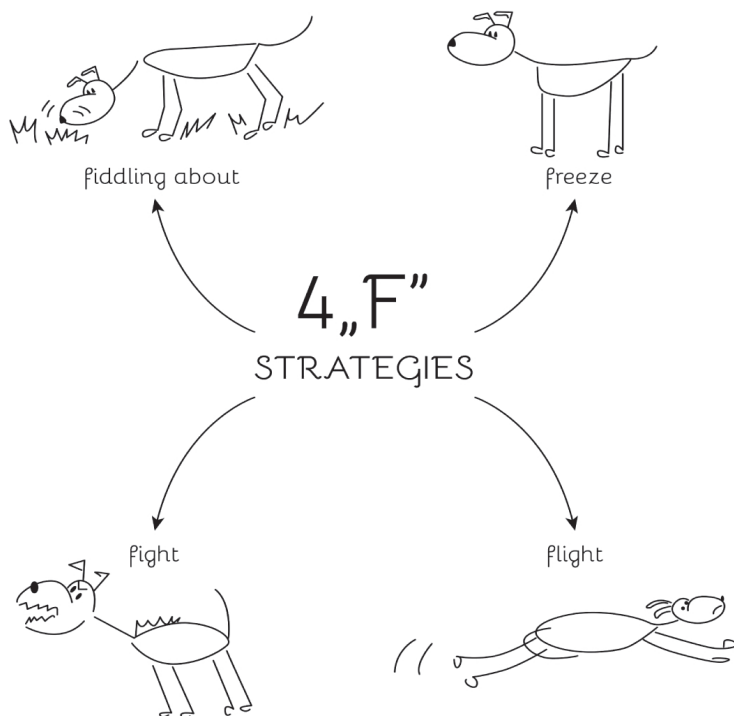
Strategies to confront unpleasant situations include:

- Freezing
- Flight (escape),
- Fight,
- Fiddling about (fooling around); (see illustration 11: 4 "F" Strategies).

What the dog prefers, to avoid an uncomfortable situation or to resolve it, depends on its socialization and experience.

Screaming, whimpering and fear cries are characteristic for stressful situations. Behavioural changes (such as resistance, restlessness, passivity) also occur in stressful situations as well as changes in the rhythm of activity (e.g. apathy) and eating habits (e.g. loss of appetite, "eating attacks", eating stones or inappropriate objects) and can be indicators of stress. In AAA passivity (freezing) can be observed quite often. At first glance, the dog seems to be calm and relaxed. But if one looks more closely, one recognizes a sense of resignation. The dog escapes from the situation mentally. This should be recognized and can be prevented. Dogs which demonstrate such responses compensate stress afterwards in ordinary situations. This would be visible when, after activities, the dog is unusually active, licks feet or the genital area, sleeps deeper or longer than usual and shows unusual eating or drinking habits.

Illustration 11: 4 "F" Strategies



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2. Relaxation

If dogs feel the social support of their owners, it ultimately leads to a re-evaluation of the situation. Dogs depend on their social partners, on people who give them social support through social security in the relationship. Short burdens with intermediate recovery periods are not only unproblematic for working dogs from the health point of view, but even desirable.

How you can prevent stress in dogs (examples)

- Genetic predisposition: breeding criterion: higher stress tolerance
- Prenatal: avoid stress of the mother (choice of a partner, anxiety, etc.)
- Small group size makes social life less complex
- Densely populated environment makes less territoriality when important breeding parental exemplary behaviour is taken over by people
- Leadership as a possible social orientation to ensure existence
- Environment: role models, systematic desensitization, adaptation
- No high expectations from the dog
- Pressure in education: primary relationship as a goal
- Health problems, vet visits
- Family changes require an important close person
- Shelter – avoid possible changes
- Ownership: the preparation and training of the new owner
- Loss of a social partner: other people should be able to lead
- Trauma: trauma treatment under the guidance of the caregiver
- Frustration (lack of need satisfaction): positive common welfare activities

Supportive Measures

- Homeopathy (in most cases for the dog and the caregiver)
- Massages: acupressure, TTouch,
- Holding: parental caring behaviour
- Music therapy: relaxing music, quiet singing, flutes, etc.
- Occupation: quiet activity or sometimes even doing nothing
- No stress! Be engaged with the dog only if you are not stressed out.
- Structuring the daily routine provides orientation & peace.
- Review the ingredients of feed (colour-smell-preservatives)
- Nibbling has a calming effect
- Positive welfare activities (preferably with us)

Nibbling as stress reduction

It appears that the same neuropeptides and transmitters (including opioids and dopamine), which are known to control appetite and satiety, trigger also reward processes in the brain (for example, satisfaction following the natural rewarding stimuli such as food, sexual activity or artificial satisfaction elements).

Movement (activity) as stress reduction

Stress is originally described as a flight or fight reaction to ensure survival with a general mobilization of the body, which prepares us for active coping with stress. The tension in muscles increases, the energy of the liver is mobilized, the oxygen supply is optimized, especially via the hormone adrenaline and later cortisol. We are nerve-strained and fully concentrated to move or to act.

Excess energy can be degraded by natural activity (movement, hunting together). With physical exertion and movement, the accumulated stress hormones can be processed anatomically.

Relaxation and stress

Regeneration (recovery) is a continuous and discrete process that ends when the initial state is achieved again. The amount of time required depends on previous activities, as well as their intensity and duration.

Recovery can be achieved either through a reduction of effort (up to the total inactivity), but also through a modified design of the burden situations. Therefore, working with the dog can enhance rest and/or delay the onset of fatigue. It is possible that one biopsychic sub-system rests, while another one is active.

Indicators of relaxation

Indicators of a dog's relaxation after stressful situations are included in its expressive behaviour, in addition to mimics, gestures, movements, chemical signals and tactile stimuli as well as sounds.

When we are working in AAA, it is essential that we are able to read our dog's stress signals. It is important to know the dog and to have a good relationship with the dog, so that we can protect the dog from the situations they cannot cope with. We need to be able to read the dog's appeasement signals and to have strategies to cope with them. It is important to let the dog off the leash, to play with it and to let it sniff the surrounding area after activities. As the dog needs to readjust to its normal stress level, this will help the dog overcome stressful situations.

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Chapter 9

Learning theory

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and Kamil Kędziorek*

9.1. How do dogs learn?

Knowledge about how dogs learn is essential to ensure proper training. Without knowledge of canine learning, we can develop completely different habits in our dogs than we intended. Evidence-based training, which is based on scientific knowledge, ensures proper training.

From a scientific point of view, learning is a process that leads to changes in behaviour (Włodarski, 1996 by: Sadowski, 2009).

Two of the most fundamental forms of learning are non-associative in nature, habituation and sensitisation. The dog is not forming association between events, the dog is learning about events that appear to occur without connection to other events (Reid, in Jensen 2013). Dogs often habituate to everyday events. For example, if a dog, which used to live in the countryside, moves to an apartment in the city, it will probably react to all the new sounds and smells. After a while the dog will get used to the new environment and will not react any more. Sometimes when we think that we are habituating our dogs to, for example, fireworks by taking the dog to a place where fireworks are ignited, the opposite actually happens and the dog gets more and more frightened. This phenomenon is called sensitization. Dogs are more

likely to sensitize when the stimulus is particularly intense, like fireworks, gunfire and thunder (Davis, 1974). Habituation is a very specific learning, while sensitization is a more generalized phenomenon (Miller & Domjan, 1981). It is the effects of habituation that we use in environmental training of dogs, and we need to make sure that we do not develop sensitization.

The most important rule of learning is that rewarded behaviours (the ones which provide satisfying effect in particular situation) will be repeated by the animal in similar conditions in the future. This is so-called “Law of Effect”, formulated in 1898 by Thorndike (Zimbardo, Johnson, McCann, 2013). It did not explain thoroughly what exactly reinforcing animal’s behaviour is, but it was a cornerstone for subsequent research in this area.

9.2. Conditioning

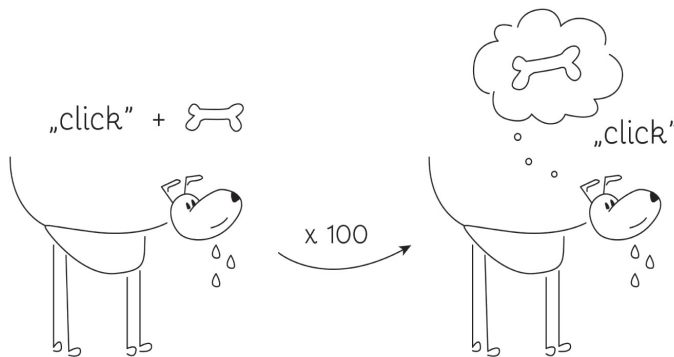
Conditioning constitutes a foundation for most training interactions. The popularity of the method results from the ease with which we can control it and the fact that it is widely described in literature.

We can distinguish two types of conditioning:

1) Classical Conditioning

It was described by a Russian scientist, Ivan Pavlov. During his research on the digestion of dogs, he discovered that dogs began to salivate right after they saw a white coat of a technician or a bowl (Dewsbury, 1997 as: Zimbardo, Johnson and McCann, 2013). The stimulus that was previously neutral for the dog has been associated with something favourable – in this case it was food; (see illustration 12: Classical conditioning).

Classical conditioning relies on initiating a response to a previously neutral stimulus (Ostaszewski, 2000). It means that a signal, which in normal conditions would not initiate any reaction of an organism, in the process of conditioning becomes important enough to cause a reaction. Moreover, the reaction is the same as in the case of an unconditional stimulus (e.g. food). By applying classical conditioning, we are able to initiate an automatic reaction in a dog to a selected stimulus, such as a clicker or a whistle.

Illustration 12: Classical conditioning**CLASSICAL CONDITIONING**

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This form of learning was first described in a scientific manner by Pavlov (Anderson, 1998). Pavlov stated that in order to allow conditioning to develop, there is a requirement of a long-time pairing of the unconditioned stimulus (e.g. food) with the conditioned stimulus (e.g. sound). As a result of this procedure, the body produces a conditioned response (caused by a conditioned stimulus), and eventually there will be a link between conditioned stimulus and conditioned response (Mazur, 2002; Ostaszewski, 2000).

Pavlov's theory was modified and influenced, among others, by the experiment of Robert Rescorli. Its implications show that mutual pairing and interplay of stimuli are fundamental for classical conditioning but not their simultaneousness in time (Anderson 1998). Thus, the informative value of conditioned stimulus is the most important (Ostaszewski, 2000). In order for the body to react to a conditioned stimulus, it must appear before the unconditioned stimulus. In this way, conditioned stimulus is treated by the body as information assuring that the unconditioned stimulus will soon appear. In classical conditioning, the dog will learn regardless of

whether it is motivated or not. The association will take place as long as the stimulus is presented and the behaviour occurs.

This mechanism is used when we would like the dog to associate, for example, a clicker with a reward, which is most often food. Some trainers recommend the use of a clicker (including Dennison, 2007; Owens and Eckroate, 2008; Pryor, 2004; Wałdoch, 2007), whose sound is very specific, so that the dog easily can differentiate a positive signal of the trainer from other sounds. The sound is used as a reinforcer to elicit the dog's behaviour, which is afterwards rewarded. In this way, a sound (signal) of reward becomes the conditioned stimulus. During the training we can also use words (commands), for instance "Ok" or "good". It is important to use the same command. Such a stimulus becomes a reinforcer for the animal, and we have some time to give the dog the reward after a reinforced behaviour.

When the dog hears the sound of a clicker, a whistle or a specific word, it feels positive emotions. The sound promises the dog a reward. Is there any dog that would not like to get some food or to go for a walk? These sounds announce a desired reward. Naturally, the dog might use some stimulus from the environment and link it with the reward. It might also be possible that the dog will create conditioned associations contrary to our intentions (Kaleta, 2002). That is why it is so important that dog training should be conducted in a controlled environment.

Thanks to conditioned stimuli, we can give the dog a clear signal without continuous recourse to unconditioned stimuli, which, in practice, would be virtually impossible. An additional advantage of the conditioned stimuli is their immediacy, which has a huge impact on the learning process. Using classical conditioning, we can teach a dog to understand praise and disapproval. In this way, it is possible to associate words with meanings (e.g., "good", "yes" and "no", "yuck").

Where else can we use classical conditioning?

We use classical conditioning when we want to associate a cue with a command. We give the command just before we present the cue, and after the cue is presented, the dog will perform the behaviour. After a while, the dog will associate the command with the cue and, eventually, with the behaviour.

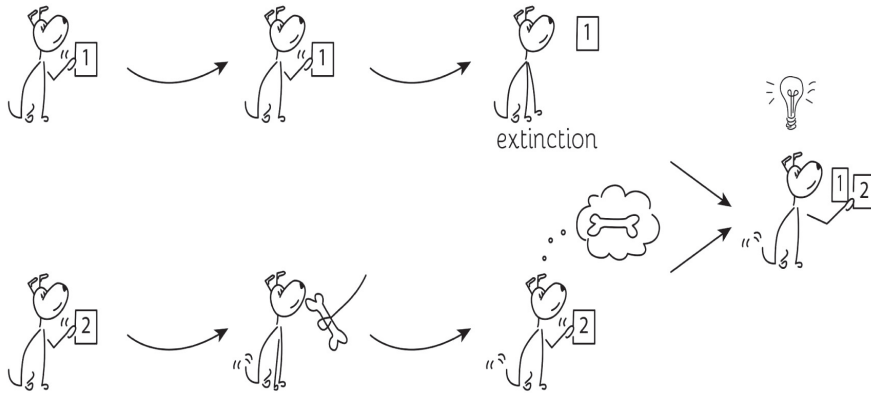
In training, the dog's energy level will be "learned" or associated (with the help of classical conditioning) with different situations, commands and environments. In habituation we get a classical conditioning of the energy level in a particular situation. When the dog is stressed when you take it away from the situation, it will learn through classical conditioning that this is not a nice place. If habituation occurs and the dog is relaxed when you go away, the energy state (feeling well) will be recorded and will appear in similar situations.

2) Instrumental conditioning (also operant conditioning)

While in classical conditioning there is a link between stimulus and response, operant conditioning teaches the relationship between response and its consequences (Anderson, 1998). Operant conditioning was first studied by Edward Thorndike, who observed cats trying to escape puzzle boxes. The cats could escape the box by pushing a pole or pulling a cord. First time it took the cats a long time to get out. But after repeated trials, ineffective responses occurred less frequently and the cats escaped more and more quickly. Thorndike generalized his findings to the "Law of Effect".

It says: "Behaviour that in a given situation evokes a feeling of satisfaction is linked with this situation. If the situation repeats in future, there is a higher likelihood that this behaviour will be copied. However, if the situation caused discomfort, the probability of repeating the same behaviour under similar conditions in future decreases." (Ostaszewski, 2000, p.104).

Instrumental conditioning is based on learning of the **consequences of behaviours**. The consequences are divided into reinforcers (which increase the probability of behaviour in future) and punishments (which decrease the probability of behaviour in future). Reinforcing the behaviour can rely on delivering both appetitive stimulus (positive reinforcement) and on withdrawal of noxious stimulus (negative reinforcement). Similarly, positive punishment is the delivery of noxious stimulus and negative punishment is the withdrawal of appetitive stimulus (Mazur 2002, Ostaszewski 2000); (see illustration 13: Operant conditioning).

Illustration 13: Operant conditioning

Operant conditioning has been fully described scientifically by B.F. Skinner. If you want to learn more about Skinner and the Skinner box, you will find more information at this link: <https://www.youtube.com/watch?v=L-DgV2vixSo>

An important finding on effectiveness of learning was that animals must have an impact on the effects of their behaviour. Otherwise, they can develop the so-called learned helplessness, which results mostly in apathy. This phenomenon was observed by Seligman and Maier in 1967 during their research on dogs. In this research, like in case of Skinner's rats, dogs were placed in a box with electric floor, where they were unable to avoid noxious stimulus.

9.3. Reinforcement

What could be the reinforcement for the dog?

It is very important to deeply reflect on the question posed in the title of this paragraph. If the dog repeats certain behaviour, it means that it is reinforced. Sometimes, in order to modify the dog's certain behaviour, we simply need to "remove" the reinforcement. Jumping at humans while

greeting them is a good example. If we understand that our attention given to the dog while it is jumping is the reinforcement, and if we then stop it, the behaviour should expire. At this point, it is worth paying attention to the so-called “self-rewarding” behaviours, – i.e. behaviours that create internal reward for the dog, such as a feeling of relaxation or satisfaction. In such case, each increase in satisfaction will be a reinforcement. For example, if the dog is scared, he starts barking and thus feels slightly better. Such behaviour will be repeated in similar conditions in future. Behaviours based on instinct and hunting do not require external reinforcement (for example, in the case of a Labrador Retriever carrying objects in the mouth and in the case of a Border Collie setting an ambush for moving objects).

Sources of reinforcement:

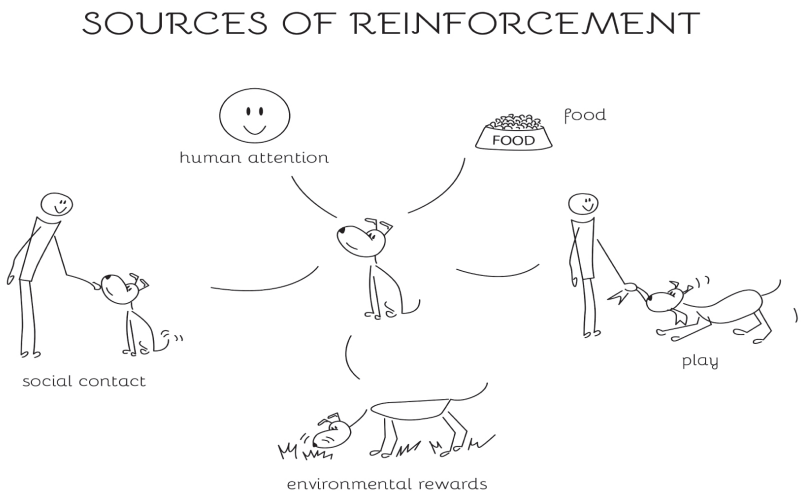
- handler
- environment
- body of animal

What other reinforcements can be used during dog training?

- 1) Food – easy to dispense. Depending on the form of administering, it may stimulate or suppress a dog.
- 2) Play – good to relax the dog after a stressful situation and to reward behaviours required from the dog. It can also be used to teach the dog self-control this you do when the dog is waiting for permission to take its toy.
- 3) Social contact – social contact is a good reward for situations where we want the dog to be calm and relaxed. Our positive emotions, petting or approval are social rewards. Some dogs regard touching in situations where they are active as distractions, while other dogs really appreciate it. In situations where the dog appreciates that the client touches it and pets it, treats or toys will just take away the focus of the dog and set the dog in another mood.
- 4) Human attention – it greatly depends on the dog’s character and the situation. Our positive emotions, approval or petting may be a reward. Touching may distract some dogs; others, on the other hand, will do a lot to receive some attention from their owners.

- 5) Environmental rewards – why should we not use the environment to teach the dog new skills? It is not easy to control this form of reinforcement but it is worth practicing. An example would be a dog that really wants to run into the lake but we give him the command: “Heel!” After the dog follows the command, we give permission to swim in the lake. (see Premack’s principle); (see illustration 14: Sources of reinforcement).

Illustration 14: Sources of reinforcement



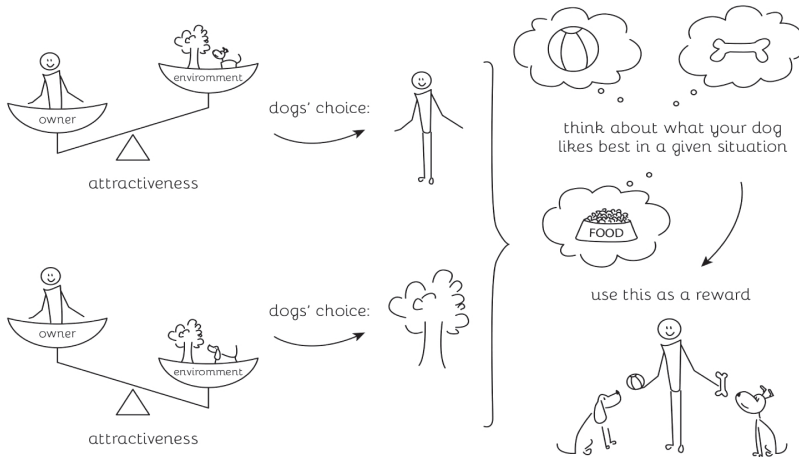
© Magdalena Warońska

Is „reward” always a reinforcer?

Once the dog does not want food any more or is too stressed out, a piece of sausage will not reward the behaviour which we would like to reinforce. Similarly, when the dog is more interested in playing with other dogs, the ball may not be a reinforcer in that situation. Such situations can lead to the habit of ignoring the handler, who does not offer anything attractive for the dog in that particular situation. Therefore, the handler should always observe whether the dog is eager to work for their toys/treats/praise. It is also important to remember that reinforcements work differently on each dog. This is why, even if it strengthens particular behaviour in one dog, it does not need to increase the frequency of the same behaviour in another dog; (see illustration 15: Effectiveness of reinforcement).

Illustration 15: Effectiveness of reinforcement

EFFECTIVENESS OF REINFORCEMENT



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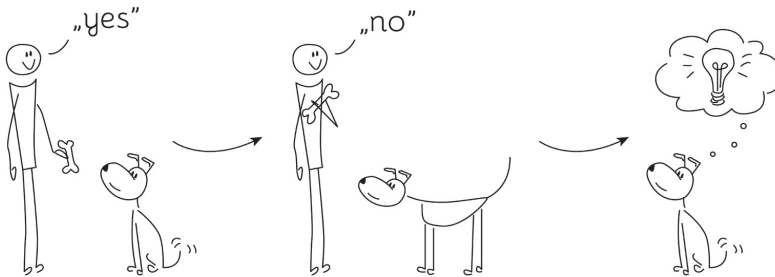
9.4. Reward schemes

At the first stage of learning, the expected behaviour should be strengthened each time. But when the dog has mastered understanding of the command, it is good to switch to occasional reinforcing (Sadowski and Chmurzyński, 1989). It makes the behaviour more resistant to extinction, i.e. the disappearance of reaction.

- 1) Permanent rewarding works well at the beginning of learning a behaviour. Every performance is rewarded. It gives the dog a lot of feedback about our expectations. However, this reward has its disadvantages – in the long run, it becomes boring. Imagine a coffee machine case. You put a 3 PLN coin and you know that coffee will soon pour into your plastic cup. Without emotion, without commitment! (see illustration 16: Clear communication and expectations).

Illustration 16: Clear communication and expectations

CLEAR COMMUNICATION AND EXPECTATIONS



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2) Random rewarding. The dog does not know when and what it will get. Behaviours which are rewarded in this way are difficult to stop (resistant to extinction). When the dog understands properly what we want him/her to do, it is time to switch to this scheme of rewarding. Extinction means that if the dog gets no response to a behaviour, the behaviour will come to an end. If the dog is jumping when it says hello to people, people tend to find that either acceptable or they do not want the dog to jump. In both cases, the dog gets attention, even from persons who do not like it to jump. The dog will not stop this behaviour, because it is rewarded nearly every time. Then you decide that you are going to ignore this behaviour, and you get everyone the dog greets to do the same. After a while, jumping will stop, but before you will see a gradual decline in the frequency of this behaviour, the behaviour will be more variable. The dog gets frustrated and may try to jump higher, bump into you, or perhaps even bark at you, the frequency of jumping may even increase (extinction burst). One of the hallmark effects of the extinction is spontaneous recovery (Rescorla, 1997). The occurrence of spontaneous recovery can be devastating for the dog's owner; if a person pays attention to the dog's recovery behaviour, the process might need to start again. Behaviours with an intermittent reinforcement history extinguish

more slowly than behaviours with a continuous reinforcement history (Jenkins & Stanley, 1950). Resistance of extinction can also be beneficial. Desirable behaviours that have been maintained on partial reinforcement are likewise resistant to extinction. When we are working in AAA, the dog sometimes has to work a long time without a reinforcement.

9.5. Square of reinforcements

Instrumental conditioning, as mentioned, involves manipulating the consequences of the dog's actions in order to reinforce them or eliminate them. From the point of view of the individual dog, there are as many as four types of possible consequences (reception or loss of reward; punishment or its avoidance). In practice, the handler can use various combinations of these. It is important that the handler keep in mind that the key issue is linking the reaction with its consequences. Effectiveness in instrumental conditioning depends on the probability of reward/punishment after the reaction and the probability of punishment/reward without completing the reaction (Ostaszewski, 2000).

In order to cause the behaviour to be repeated, it must be strengthened. In order to eliminate the behaviour it must be extinguished. The handler has two types of reinforcement and two types of punishment at their disposal. "Positive" and "negative" do not have an emotional burden here. In the case of instrumental conditioning, "positive" describes adding something, while "negative" means withdrawing something.

Reinforcement will increase the probability of a behaviour:

- **Positive reinforcement (R + award);** it describes a situation when the consequence of behaviour is pleasant for the animal. It receives e.g. food, attention, enjoyment, achievement of objective. Thus, such behaviour will be repeated frequently.
- **Negative reinforcement (R – avoidance);** it describes a situation when the dog performs behaviour and thereby avoids further negative consequences. Teaching the dog to sit by pressing its hindquarters could be an example. The dog learns that it should sit in order to avoid pressure.

It is not always so easy to know and distinguish between these theoretical concepts. For example, sometimes we use both negative and positive reinforcement. Positive reinforcement works because the dog is deprived (has an unsatisfied need of the positive reinforcer). Treats will work better if the dog is hungry, playing with the dog will be more efficient if the dog has been left alone for some hours. Treats can also be looked at as a negative reinforcer (removal of discomfort), because they reduce hunger.

Punishment will decrease the probability of a behaviour:

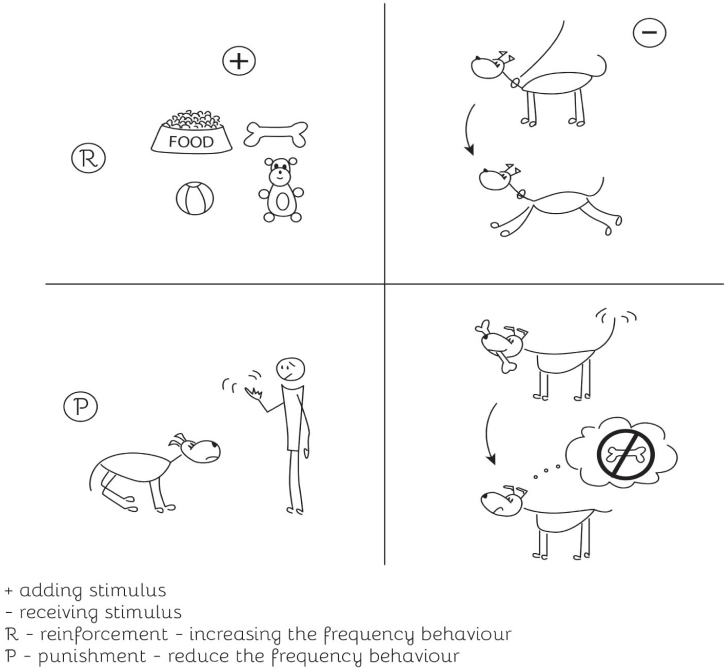
- **Positive punishment (P +);** we describe a situation when the consequence of behaviour is unpleasant for the dog. A good example is when the dog tries to take something from the table and you make a big scream. Thus, the dog learns that stealing is associated with a high scary sound. If the negative consequence of this behaviour (scary sound) exceeds the benefits (e.g. feeling of excitement/pleasure when eating the food), the behaviour will disappear. In order to make punishment work, it must be immediate, strong enough and must always be connected to a particular behaviour. The lack of consistency in applying the punishment can strengthen the behaviour, because it will be associated with a feeling of relief when there was no punishment. It can also affect the relationship between the dog and the handler (distrust of the handler). It is also a major source of stress for the animal. It is always worth considering forms of training other than positive punishment. The reaction of avoidance and escape caused by painful stimuli may cause a situation in which the owner will have problems calling the dog or encouraging it to train (Sadowski and Chmurzyński, 1989).
- **Negative Punishment (P – loss);** it is often used in positive dog training. When the dog behaves in an undesirable manner, it loses a valuable resource for itself. Example: the dog jumps when greeting, so the man turns around ignoring the dog and thus the dog loses handler's attention.

Positive training is not only focused on learning new behaviours, but also on the elimination of those which are considered inappropriate. One of such methods is differential reinforcement of alternate behaviour (DRA), described among others by Mazur (2002). In this method, delivered

behaviours are rewarded instead of undesired ones (for example, if the dog stops jumping to greet humans and sits instead). In order to eliminate inappropriate behaviours, positive methods can also be used (Kaleta, 2002b), i.e. a gradual disappearance of behaviour that is not rewarded. In order to achieve this goal, it is enough for the handler to consistently ignore the dog when it does something wrong (extinction). Another valuable method is time-out with exclusion (Mazur, 2002). In the case of dog training, this will mean isolating a dog from access to rewards, when it behaves inappropriately (e.g. placing it alone in a room or in a box/cage for a while); (see illustration 17: Possible outcomes of operant conditioning).

Illustration 17: Possible outcomes of operant conditioning

POSSIBLE OUTCOMES OF OPERANT CONDITIONING



| Possible outcomes of operant conditioning | Adding stimulus: | Withdrawing stimulus: |
|---|--|--|
| Increasing the frequency of behaviour | Positive reinforcement – add something nice (e.g. treats, ball, bone etc.) | Negative reinforcement – take away something unpleasant (e.g. letting dog off the leash) |
| Reducing the frequency of behaviour | Positive punishment – add something unpleasant (e.g. “Bad dog”) | Negative punishment – take away something nice (e.g. bone) |

Premack’s Principle (1965)

According to Premack’s Principle, more probable behaviours will reinforce less probable behaviours (Ostaszewski, 2000). If the dog exercise, it may constitute a reward for performing less desired behaviour. In other words, animals will perform behaviour that they would be less interested in performing otherwise in order to gain access to performing behaviour that they would prefer to perform.

9.6. Social learning

Social learning is based on obtaining information or learning behaviours by observation and interaction with other individuals which can be representatives of the same or different species. Research on this topic began in 1954 on a group of chimpanzees. The project was called: Do as I Do. Recent research suggests that we have underestimated dogs when it comes to observation; they are capable of “imitating” humans in many different behaviours and behavioural chains. More information about social learning for dogs can be found on the Internet by entering in the browser the phrase: Do as I Do.

Practical application in dog training:

An example of social facilitation is when a dog, reluctant to climb a set of slippery stairs, easily follows another dog up the stairs and afterwards, it can comfortably climb the stairs on its own. Sometimes trainers use social facilitation to encourage a dog to try a novel treat, to investigate frightening objects or to enter an unknown environment (Reid, in Jensen 2013).

The efficiency of solving physical problems can be increased by observing skilful individuals. In one situation dogs had to go around a V-shaped transparent wire-mesh fence in order to obtain rewards (their favourite toy or food). The experiment shows that dogs perform better when a human demonstrator tried to make them watch, but interestingly their performance did not improve when they were shown the solution by another dog (Pongracz et al 2004).

It can be difficult to use social learning to increase desired behaviours because we do not know exactly how it works. Sometimes it helps to bring another dog when we want to teach the young dog some behaviours: quiet behaviour in the classroom, learning to recall correctly, interactions with other dogs and learning tricks. A young dog can acquire new skills quicker while watching an older one. However, it appears that the absorption of undesirable behaviour occurs even more rapidly than in the case of desired. So if you have an older dog with a problem, it is worth eliminating this behaviour before bringing a young puppy or else you will need to isolate your puppy in situations where he could learn the undesirable behaviour from the older dog. Claudia Fugazza is an Italian researcher who has written several articles about dogs imitating human cues. For more information about her research you can watch these You-tube videos:

<https://www.youtube.com/watch?v=oC3OqbjlxkM> YT channel Claudia:
<https://www.youtube.com/user/ClaudiaFugazza/videos>


9.7. Trial-and-error learning

Trial-and-error learning is a natural form of learning for animals, strongly associated with the ability to survive in a changing environment. It is affiliated with the Law of Effect by Thorndike and can be considered a form of instrumental conditioning. It is a very intuitive method of learning but it requires a lot of energy and spontaneous activity. It is worth paying attention to it, because it is fundamental for developing dog training technique which is applied with the use of a clicker. It involves learning complex behaviours by separating them into smaller components and combining them step by step while approaching the final objective (Mazur, 2002). It is a method that brings long-term results, as it is the dog itself who solves the encountered problem. Proper and exact determination of activity and dividing it into small steps allow the handler to observe and strengthen those steps which will lead the dog to reach the final objective. The trick is to gradually raise the level and to avoid additional “prompting” of the dog. This type of exercise can be used, among others, to increase the involvement of the dog, its independence and self-confidence.

On the basis of these learning theories we can train dogs successfully. By applying these theories to our companionship with dogs, we can live together and teach the dog appropriate behaviour both in everyday life, in work and in competitions. How we apply these theories to practical training is discussed in the chapter on Training.

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Chapter 10

Training/Education of the dog

Prepared by Line Sandstedt and Mari-Louise Asp

To train our dogs successfully, we have to know the theoretical basis of learning theory, and we need to have the practical skills to make the theory come true. The biggest difference between an average dog trainer and a really good one is often the ability to read/see, to adjust, to plan and to reward the right behaviour. Dog training is a practical skill which needs to be practised continuously. In order to have a training session that goes forward successfully, it is advisable to document what you are doing, what the purpose of the training is, how it went and what will be the focus next time.

10.1. Training diary

A training diary can look like this:

- Date: It is good to know when and how often we train
- Time: What time of the day it is; if we mainly train in the evenings, we should not be surprised if the dog is tired and out of focus if we are going to “work” in the mornings

- Where: It is good to know if we are outside or inside, if it is a novel place for the dog or if it is a known place, if there are other dogs present or other animals etc.
- Who else were present: Did I train alone, were there other training mates, were there other people nearby etc.
- Goal: What is the goal of the training session, there always needs to be a goal, it can be, for example, to focus on the clients, to listen to my commands, to deliver a ball to the client's hand, to be passive...
- How did it go: Write it down as soon as you have finished training; most people forget the little important details very quickly
- What to train next time: Often just after training you will have a lot of thoughts about how to do it or what you have to focus on next time...
- How was the dog: This makes you focus on your dog's emotions in the training.
- Something special: Sickness, heat, construction work, etc.

By doing this, you will be more systematic in your training of the dog, and training will move forward quicker and be of better quality than without a training diary. If you wonder how often you have trained particular behaviour, how long you have been training that specific behaviour and why the behaviour does not “work” when you want it to, you will often find an answer in your diary.

Goals:

- Shape permanent behavioural patterns
- Create platforms for commands
- Reinforce wanted behaviour
- Prevent and stop unwanted behaviours
- Create behaviours that do not necessarily need to be rewarded physically each time (self-motivation)

What the dog considers to be a reward is individual and, as we earlier stated, depends on what activates the dog's motivation system and what engages the dog. A reward can be social, eatable, playable etc.

4 essential factors increasing the quality of training:

- Criteria
- Timing
- Quality of the reward
- Variability in rewards

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

10.2. Training techniques

10.2.1. Training with help

- **Prompting**

By prompting, also called capping, it is easy to "lead" the dog into the wanted behaviour.

For example, hand with a treat, play at a specific destination. The advantage of this method is that it is an easy way to teach the dog what we want. A high reward frequency (the dog does it right every time) makes it easy to get the dog to perform the behaviour. The disadvantage of this method is that the dog can become dependent on the "lead".

- **Lead and prevent**

Lead and prevent the dog from doing unwanted behaviours. For example, putting a dummy in the dog's mouth and helping the dog to hold the dummy or restricting the dog from coming to you, when you try to teach him/her to stay at a distance, by putting on a leash and tying it somewhere.

- **Learning aid**

A "target" can be a teaching tool. The target can be a mat, the end of a stick, a box or something that the dog learns to aim for and reach with its nose or paws. You have to teach the dog how to use the target before you can apply it in your training.

- **Body and sound**

Body movement and sound can often be used in combination with other rewards and learning aids, e.g. hand with a treat. In addition, we can tell the dog where it should be by means of our gaze.

The dog gets accustomed to these helpers quickly and to avoid getting stuck with helping signs, one must gradually decrease their use until the dog is able to perform behaviour with only a command sign. Sometimes it is not essential to get rid of helping signs when we are doing AAA work with our dogs. The important thing is that we have to decide beforehand, if the learning aid needs to be taken away or not.

10.2.2. Training without help

Free operant training aims at shaping behaviour. This is a method where you give the dog very little help and instead you focus on capturing and reinforcing the spontaneous behaviour that the dog performs naturally. This method requires good planning, patience and timely increases in demands.

- **Shaping**

Shaping behaviour means to reward any attempt in the direction of or similar to the goal you want to achieve. It is important to raise reward criteria successively and not to stay too long in each phase; the dog must constantly perform better than last time, otherwise behaviour may be established and it may be difficult to move on. In shaping many processes occur simultaneously and we reinforce behaviours resembling the target behaviour. The risk is that if we fail to reinforce the behaviours we want, we will see fewer instead of more of them.

By criteria elevation we stop reinforcing behaviour that was rewarded previously. The behaviour is usually more intensive (and may vary in form and in other side effects) before it gradually disappears. This method gives us little risk of aid dependency.

- **Capturing behaviour**

We can also wait for the behaviour to happen and reward the dog when it happens. This is called capturing behaviour. We can only use it for behaviours that are likely to happen relatively often over some period of time. It will be inefficient if you have to wait for days before the behaviour occurs.

Exercise:

If I am going to teach my dog to lie down in a certain place on a blanket, I can do it in several different ways. Here are examples of four different approaches:

1. I can prompt the behaviour by putting a treat on the carpet
2. I can shape the behaviour by rewarding the dog when he moves closer and closer to the carpet
3. I can put the blanket in some place, and just wait for the dog to go there by itself – capturing the behaviour
4. We can lead the dog to the carpet by holding/pulling the dog's collar

10.3. Learning

The most important factors for the ability to learn:

- Threshold value and innate motivation
- How easily the dog is motivated
- Ability to combine
- Memory
- Ability to relax
- Fear

Threshold value tells us how easily behaviour is triggered in an individual (e.g. barking). We can see large individual variation among different “personalities”. There are differences in the ability to associate and there are different levels of interest in particular amplifiers. The dog's interest in showing certain behaviours varies as well. Some dogs are very easy to motivate from their puppyhood and some are not. The so-called working breeds are more motivated to work with humans and they are easier to train.

We also need to consider the dog's relation to its handler and its ability to cope with various environmental disturbances.

Memory

Short-term memory covers information about the dog's latest experiences. It is important for process association and it is sensitive to interruptions and impressions. Normally, short-term memory will fade in about two minutes (ibid).

How long the dog can "keep" the event depends on: the amount of time used, number of interruptions the dog experiences in the learning situation, dog's habituation level to the learning situation and the "value" the dog sees in learning (Svartberg, 2000).

Long-term memory is activated in the last part of the learning process and creates physical changes in the brain. Many similar short-term memories create a consistent long-term memory that becomes active after some hours. Dogs do not forget what they have learned.

Good conditions for learning:

- Well planned
- Few disturbances
- Correct and consistent influences
- One thing at a time
- Intensity variance
- Avoid dog's fear or aggression

10.4. Rewards

Quality of the reward is important because an easily rewarded dog is an easily trainable dog. Use as much time as you need to figure out what the dog considers to be good rewards.

(The quality/mismatch of reward is often the problem when we do not get expected results). To make rewards worth working for, we need to consider how we live our everyday lives. Does the dog get things for free all day? Does the dog get a slice of your cake every time you eat cake? Does the dog expect to get food from your plate? Does your dog play with your neighbour's dogs whenever it wants? Does your dog have free access to toys all day?

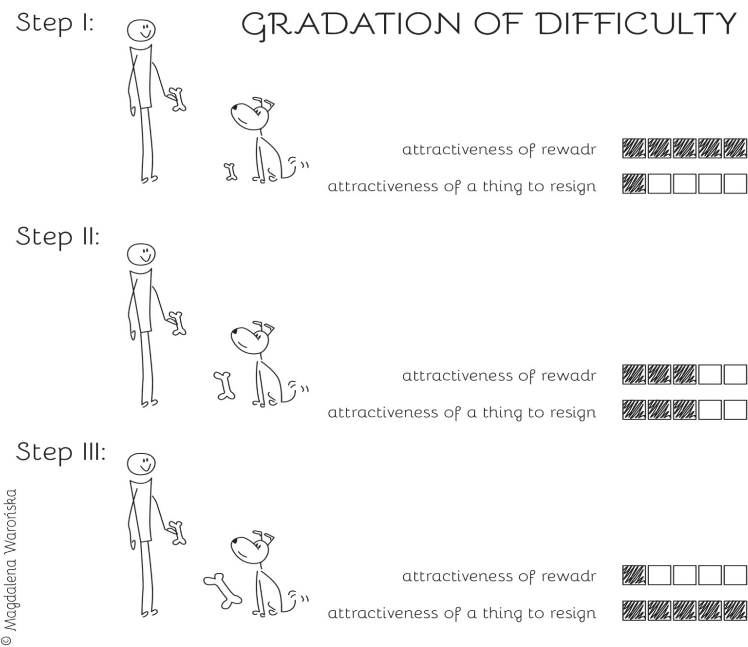
All these situations can be used as rewards for good behaviour. We just need to take charge of the resources and use them to make the dog perform certain behaviours to get them. Food, for example, can persuade the dog to carry the terrible metal dummy in the mouth. It may also be wise to make the dog do some exercises before it gets to play with their „best buddy” as a reward. If the dog likes to be scratched in a special spot, it should do something you ask for, before it is scratched. It can be wise to think over what the dog considers to be crucial resources in its life and use it as reinforcement of behaviours.

Small rewards for small achievements; great rewards for great achievements:

If we get one million in salary, no matter if we work 4 or 20 hours, many of us will choose to work only for 4 hours – it is the same with our dogs.

If the dog gets a treat for every turn and every step, it is not reasonable to assume that the dog is content with the same treat after walking together with you for 20 minutes; (see illustration 18: Gradation of difficulty).

Illustration 18: Gradation of difficulty



10.5. Learning process

Steps in the learning process:

1. Arouse interest
2. Influence and help
3. Reward
4. Conditioning
5. Maintain variable gain
6. Generalization
7. Coordination

Conditioning / stimulus control

1. Give the signal when the behaviour is performed voluntarily. Prompt and shape or capture spontaneous behaviour.
If prompting, it is essential that the command comes just before you “lead” the dog; otherwise, it will be very difficult to train away the “lead”/help. Reduce the help gradually.
2. Provide a signal just before the behaviour is performed voluntarily (Discriminative stimulus-behaviour relationship)
3. Test if the signal works progressively in more difficult situations
4. Teach your dog to wait for the signal. Reward only if you have given the signal first.
5. Teach your dog to distinguish between signals.
Teach the dog to recognize “nonsense signals” and the ones that lead to reward.

Discrimination represents the phenomenon, whereby a response primarily occurs after a particular stimulus and less often after similar stimuli. For example, we can teach our dog to discriminate our verbal commands and follow our body language. In the obedience exercise “heelwork”, the dog will follow the handler from the initial position when the handler starts with the left foot first, and in the obedience exercise “sit and stay” the dog will “stay” when the handler starts walking with the right foot first.

We want the dog to sit quietly and greet guests as they enter the house, but when we go out for a walk, we do not want the dog to care about

strangers, except when they say hello and want to greet the dog. The last example shows that the environment in which your dog will do the exercise is an important discriminatory stimulus for the behaviour that is going to be reinforced. This means that when we are going to exercise “hands clean”, this must be done in the environment where we need it.

A sofa can be a discriminatory factor. The dog learns that it is allowed to jump on the sofa at home, but if we go to visit someone, their sofa is off limits.

10.6. Things to consider when training a dog for AAA

The most important thing to have in mind is that dogs in this field of work are supposed to interact with the clients; therefore, the handler is not supposed to be the dog’s focus. If a client throws a ball for the dog, the dog is supposed to deliver the ball back to the client not to the handler.

At the same time, the dog has to have the handler’s will in mind as well, as the handler has to be able to stop or correct the dog in an easy way.

As the handler, you have to choose the right way of training for you and your dog. Some people use a lot of treats, others use a lot of play and some handlers use more social rewards. It is up to you to decide what is best for you and your dog.

Regardless of the methods and reinforcers, it is important to teach the dog to work longer and longer before it gets his/her reinforcer. When the dog is out working, it will sometimes have to wait for a long time before he/she gets the treat or ball etc. Sometimes we can see that the treats and toys take all the dog’s focus and interaction with the clients is not the dog’s priority. In such case, we have to stop and rethink our training: what can we change and how can we get the clients into focus. For example, we should think about how we can make the activity with the client a reinforcement.

It is the client and dog’s focus on the client, which is the important issue in these kinds of activities. You do not want the client to think: “Even the dog does not care about me, it only cares about the handler or its treats/toys.”

Chapter 11

Animal welfare

Prepared by Magdalena Nawarecka-Piątek

11.1. Dog welfare in the context of AAA

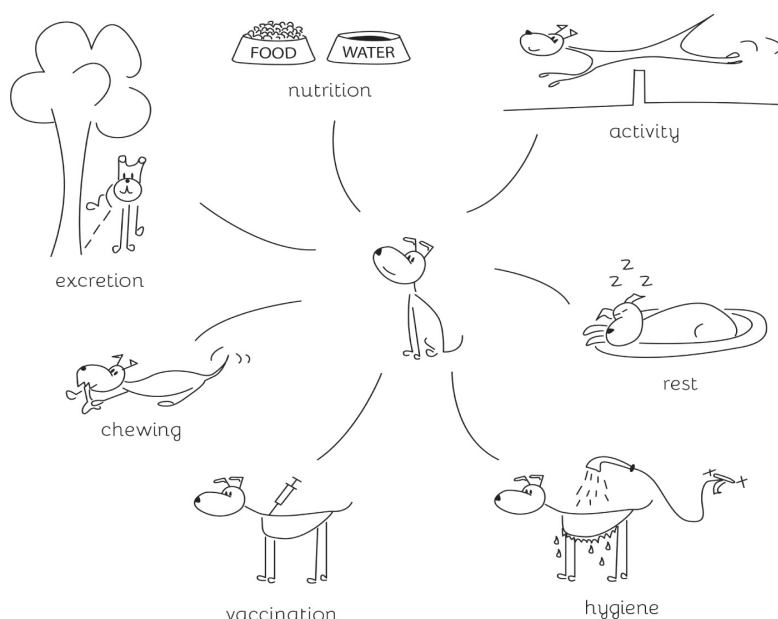
A dog trained to assist in AAA should be friendly, well-behaved, and able to perform in various environments. These features are associated not only with a particular breed or a given individual, but also with the conditions the dog is kept in. Proper raising and training for the purpose have an importance influence on the overall characteristic of a “working” dog.

The purpose of this chapter is to take a closer look at the conditions that a dog needs to be provided with in order to safely and effectively participate in AAA. One should note that the everyday comfort of the dog and its welfare during the classes have an important impact on the participants’ performance (Lind, 2009). The process of socialisation, i.e. building a dog’s self-confidence in various conditions by providing positive experience, is one of the crucial aspects of preparing a dog for AAA. It is of great importance to effectively manage stress and protect the dog from overexposure. Stress constitutes an important element of the notion of welfare (see chapter on Stress), since it is often applied as an indicator helping to determine if the proper conditions for a dog are provided.

Moreover, the handler should pay particular attention to the dog's physical condition, including regular veterinary physical examinations and disease prevention (vaccinations, deworming and protection against insects).

11.1.1. Keeping the dog in good physical condition

Illustration 19: Keeping the dog in good physical condition



© Magdalena Waroriska

11.1.2. Welfare principles and criteria

The notion of welfare sits at the intersection of a number of disciplines, including ethology, biology, psychology, economy and sociology. It does not have one single definition (Duncan, 1993). That is why we need to take a closer look at a number of key aspects that will bring us closer to an understanding of how and why we should set standards for animal keeping and dogs' participation in AAA.

Historically speaking, the first coherent definition of welfare was provided in the Brambell Commission report elaborated in 1965, where it was described as a “wide term that embraces the physical and mental well-being of the animal”. Since the Brambell definition of welfare has often served as a basis for various legal regulations pertaining to conditions for keeping farm animals, it seems of importance to take a closer look at the so-called **Five Freedoms** that it includes:

1. Freedom from hunger, thirst or unsuitable food,
2. Freedom from thermal or physical discomfort,
3. Freedom from pain, injury and disease,
4. Freedom from fear and distress,
5. Freedom to indulge in normal behaviour patterns.

These guidelines should be treated as general guidelines, but we need more specific regulations regarding animal welfare/well-being. Today we have a better understanding of how the intellectuality and biological functions of animals work, and research on the topic is constantly bringing us closer to better comprehension.

Animal welfare is often referred to by scientists as a “state of harmony, both physical and psychological, of the animal with itself and with its environment” (Fox and Mickley, 1984). In this context, harmony or balance means to maintain the organism in an optimal state (i.e. in the most favourable conditions) for functioning and development (Duncan and Dawkins, 1983). It can be also stated that the notion of welfare refers to a situation where an animal is able to cope cognitively (mentally), emotionally and behaviourally with the physical and social environment that surrounds it (Gonyou, 1994). Duncan (1993) argues that a seemingly objective measurement of “coping” should be replaced with a different indicator of the animals’ welfare, that is, what an animal feels. Such an approach implies that conscious affective states of animals should be taken into consideration and hence the necessity to reduce pain and maximise pleasure in order to increase animal welfare³. The most common pain measurement scale that usually first comes to mind is the stress level. The main advantage of this measurement is that it can be easily quantified

³ In the White Paper IAHAIO (2014) talks of “wellbeing” instead of “welfare”.

and it can be assumed to be inversely proportional to welfare (Dantzer, 1993). Drawing conclusions on the level of welfare without prior identification of possible causes for stress would be a mistake, it is necessary to take into account the situational context (Gos, 2011). McGlone (1993) states that the level of stress, perceived as a physiological measurement, is related to welfare only in a situation where the system is disturbed to the point where it induces sickness or psychological and physical disturbances.

When “working” in AAA, it is important to pay attention to feelings. Hence, we need to read the dogs’ signals well and pay special attention to stress signals (see chapter on Stress). It would be easiest to say that maintaining animal welfare means minimising suffering (which can be measured by stress level) and, at the same time, maximising pleasure. It should be noted, however, that experiencing stress which is not excessive or long-lasting is completely natural for all the living organisms. It should be taken into account that sheltering from stress usually does not assure the animal’s comfort. The basic rule is to give an animal a possibility to cope with the situations it encounters. We can only achieve this by ensuring proper physical conditions (e.g. shelter suitable for a given species), proper care, as well as a possibility to socialise and learn, which will provide the animal with emotional, social and cognitive competences. Therefore, in practice, in order to properly determine the level of welfare, one should possess extensive knowledge about a given species and a particular animal. For example, a rabbit may cope with the sense of danger if it has a possibility to hide, and a horse is able to cope with the sensation of hunger if it knows that it can eat whenever it likes. Table 1 draws on the recommendations of the Brambell Commission. When interpreting the mentioned factors, the specific character of a given species and the physical and psychical state of a given animal must be taken into consideration each time.

For a handler of a dog participating in AAA, all the aforementioned definitions and indicators can be used with benefit to ensure the comfort of the dog during the activities. The guidelines should also be treated as a set of recommendations on which education about animals, spread among the public, should be based. An animal experiencing good welfare can easily accommodate to new situations, which on the one hand proves its well-being and on the other hand provides us with a possibility to experience the happiness of our companion.

Table 1. Welfare principles and criteria

| Principles | Welfare criteria |
|-----------------------|--|
| Good feeding | 1 Absence of prolonged hunger |
| | 2 Absence of prolonged thirst |
| Good housing | 3 Comfort around resting |
| | 4 Thermal comfort |
| | 5 Ease of movement |
| Good health | 6 Absence of injuries |
| | 7 Absence of disease |
| | 8 Absence of pain induced by management procedures |
| Appropriate behaviour | 9 Expression of social behaviours |
| | 10 Expression of other behaviours |
| | 11 Good human-animal relationship |
| | 12 Positive emotional state |

Source: Blokhuis H.J., Veissier I., Miele M., Jones B. (2010). *The Welfare Quality® project and beyond: Safeguarding farm animal well-being.*

11.1.3. Working time

Another important condition to assure the dog’s welfare is to determine its work time. Dogs will get tired just as we do, and there is no blueprint in how demanding the situations will be for each dog. It depends on both the dog’s individual features, such as the breed, the level of skills, temperamental factors, age and condition as well as the type of the setting, conditions in the room, external temperature, number of participants and the number of dogs co-participating in the session. Some activities will, for example, include walking with clients outside, perhaps even without a leash. That will normally put very little pressure on the dog, and the dog can have more than two clients per day. In another situation we can have six clients in a group in an institution, with a lot of noise and unpredictable things happening. After 45 minutes the dog will probably be very tired and sleep for the rest of the day. Regarding these examples, we cannot be specific

in recommending working time for dogs doing AAA. In the White Paper (2014), IAHAIO recommend that one session should be no more than 30 to 45 minutes. But we will strongly recommend that the owners should pay attention to their dogs and stop work before the dog is bored or exhausted. In Germany and Switzerland, for example, there is a common rule that a dog should not work more than three times a week for one hour at a time.

11.1.4. Mentality of the dog

Sometimes, during AAA something unexpected may happen and frighten our dog. If the dog's mentality is strong, the dog is well-prepared for the activities and has a strong bond with the handler, it will only need a moment to switch its focus back to the activity. An important role of the owner is to note changes in the dog's mood and to properly respond to them. Depending on the situation, it may be helpful to send the dog to a safe place and give it a chance to calm down, help it to release emotions, e.g. by means of a chew toy, satisfy its thirst or take a short brake. Adequate response from the handler and immediate support for the dog depend directly on the skill of "reading" the dog and, at the same time, help to provide suitable psychological and physical comfort for the dog.

Sejian et al. (2011) emphasize the importance of achievements in the field of scientific assessment of animal body language, making it possible to interpret welfare measurements more accurately. Observation of animal behaviours makes it possible to determine if an animal is calm, nervous, tense, relaxed or distressed (*ibid.*). Hence, it can be stated that the capacity that seems of crucial importance to properly assess the state of a service dog and to ameliorate its living conditions is to know how to read body language and verbal signals characteristic to the species. Each handler should be familiar with at least basic indicators of animal welfare (see chapter Communications).

11.1.5. The (non physiological) needs of the dog

When it comes to dogs, a factor that has a significant negative impact on welfare is an impoverished physical and psychological environment, as well as lack of contact with humans. For example, in Poland a great number of dogs live in isolation from humans and without proper, or even any, mental and motoric stimulation. For a dog participating in AAA, such a situation is unacceptable. A well-treated animal is a safer and more useful companion.

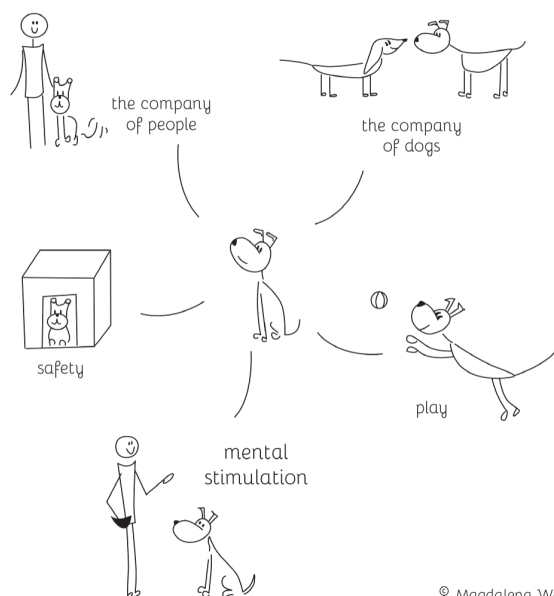
Dogs need both human contact and proper stimulation. Solving a problem successfully is the key element of coping, which is positively correlated with the influence the animal has on its surroundings. Contact with its own species is something most dogs benefit from. This applies in particular to puppies (Harmata, 2014). Dogs that live in urban surroundings are frequently in contact with other dogs. The owners of both puppies and grown-up dogs should make sure the well-being of their dogs is ensured by dog-to-dog encounters. When it comes to social animals, isolation makes it impossible for them to recognise members of their own species, to control aggression, to discern play from other behaviours, etc. (Kaleta, 2007).

Taking into consideration the safety of people in contact with animals, we should always bear in mind that there is a direct link between aggressive reactions and the dog's level of satisfaction, security and bond with the handler. Also, a low level of welfare can be the root cause of antisocial and unwanted behaviours expressed by dogs. Some dogs that people find calm, nice and well-behaved are in fact apathetic. Apart from apathy, the behaviours that clearly indicate a declined level of welfare include self-mutilation, injuring companions, acting irrelevantly to the context, fear, escape and stereotypies (repetitive or ritualistic movements). The latter usually result from the impossibility of satisfying the animal's needs in a normal and adequate manner. The most frequent pathologic behaviours include running back and forth along the fence, running in circles, chasing its own tail, excessive chewing on various objects, eating faeces and destructive behaviours (Kaleta and Fiszdon, 1999). The aforementioned pathologic behaviours apply to all species, but, of course, they take different form depending on the group. Such behaviours may be induced by tethering or keeping a dog in a kennel.

The better we know a given species and the better we understand a given animal and its personality, the better we are able to ensure its welfare. A handler working in AAA must know what animal welfare means, it is many aspects. Human-dog teams participating in AAA need to have a close relationship. This cannot be obtained if the dog does not live together with the handler. Tuber et al. (1999) found that caressing, playing and training increase the dog's influence on its environment and help the dog to cope in stressful situations. Moreover, Popova et al. (2012) note that human interaction may significantly enrich the dog's environment and, therefore, positively influence the dog's welfare. Of course, one should also help the dog to stay in good physical shape, not only in terms of nutrition and health but also in respect to rest. In the majority of cases, lack of movement elicits frustration and irritation in dogs; that is why one should devote some time and attention to their needs, since neglecting a dog may induce behavioural problems (O'Heare, 2009). For more information on dog-owner relationship see chapter Human-dog relations; (see illustration 20: The (nonphysiological) needs of the dog).

Illustration 20: The (non physiological) needs of the dog

THE (NON PHYSIOLOGICAL) NEEDS OF THE DOG



Welfare in a nutshell:

- The notion of welfare refers to physical and mental well-being.
- The conditions that we should provide for an animal depend on its needs, species, age, health, etc.
- Decreased welfare level results in behavioural problems (including excessive aggression), diseases and shortened life span.
- The most important to an animal is the ability to cope with the situation it encounters. This means that the animal may hide from a stress-inducing element, satisfy its hunger and curiosity, as well as meet other members of its species (in case of social animals).

How to ensure animal welfare?

- Get to know the needs of a given species
- Provide food and water, according to the animal's needs
- Provide shelter similar to the one the animal would use in the wild environment
- In case of social species – ensure the companionship of other members of its species
- Adjust the temperature and humidity to the animal's needs
- Enable movement, play and a possibility to familiarise with the environment (!) in safe conditions
- Protect the animal from pain, injury and suffering
- Provide immediate veterinary help, if needed

How to determine if an animal is happy?

- Good appetite (some dogs do not have a good appetite even if they are happy)
 - It is curious
 - It is physically healthy
 - It behaves in a manner typical of the species
 - In case of species with a long history of domestication (e.g. dogs, horses, cats), it willingly enters into interactions with humans.
-

11.2. Basic veterinary knowledge

Prepared by Line Sandstedt and Mari-Louise Asp

When working with your dog in AAA, it is important to recognize when your dog does not feel well. Working close to strange humans is a challenge, and it will be even a bigger challenge for the dog if it is not feeling well. Can you imagine having a serious toothache and then being hugged?

Sometimes it is easy to detect if the dog is not well. It can be limping, not eating, vomiting, it can have large cuts or observed trauma, e.g. you see

that the dog is injured. But there are times when your dog's signs of pain can be far more subtle. Some dogs can be quite stoic and do a good job of hiding and "living with" their pain. If you are going to work with your dog, you have to be good at detecting when there is something wrong. If you have a good idea of what is "normal" for your dog, it is much easier to recognize when something is abnormal.

11.2.1. Disease symptoms recognition

Eating pattern: Keep track of how much your dog usually eats, then it is easier to recognize a difference in eating pattern. If the dog suddenly loses its appetite or all of a sudden has a very strong appetite, there could be something wrong with your dog.

Weight: Your dog's weight is also an important health factor. If your dog gets the same exercise and the same amount of food, and it starts putting on or losing weight, it can be a sign that things are not right. Make sure that your dog is not suffering from overweight: dogs have exactly the same problems with overweight as people. If you have tried to put your dog on a diet and given it more and customized exercise, and the weight is not reduced, we advise contacting a veterinarian.

Drinking pattern: Often dogs start to drink more water than normal when they have an infection or toothache. If you know exactly how much water your dog drinks, you can detect any irregularities, at an early stage.

Toilet routines: Monitor your dog's faeces; if the dog's droppings are not normal for some days, you should take it to the vet's. Do not take a dog that suffers from diarrhoea to visit an institution, even if you think that it is just something the dog has been eating. (see Zoonoses in chapter on Risk management). Dogs which have back pain, for any reason, may have a difficulty with the proper defecating position. Sometimes back pain can lead to constipation.

It is also recommended to monitor the dog's urine and how often the dog urinates during a day. If the dog urinates more often, it is often linked to drinking more water. If there is blood in the urine, the urine will appear more red (darker) than normal.

Mobility/energy changes: Dogs that have pain can move around less or they can be stressed and move around more than they normally do. The pattern of movements can also change; dogs that suddenly start pacing a lot are often in pain.

Posture changes: Your dog changing the way it stands can also be a sign of some problems. Standing with its back lower than normal and the legs tucked under it, or "curving" its back in a way that it looks like the dog cannot stretch can be a sign of pain.

Changes in behaviours: Dogs with pain can change their behaviour in many ways: they can be grumpier, clingier, they can have problems getting into/out of the car. Some of them may seem as if they need to think before they can climb the stairs. A lot of different changes can happen; the important thing is that you recognize the change in behaviour.

Eye changes: If the dog is in pain (somewhere else in the body), their pupils may be dilated (bigger). If there is something wrong with the eye, it can be red or it can be more wet than normal etc.

Ear changes: A lot of dogs, depending on their breed, have problems with their ears. It is advisable to know what the dog's ears smell like and what colour they are when they are in good condition. Then you can be aware when the smell/colour is different one day.

Changes in breath: A lot of dogs have problems with their mouth and it is often their teeth that are causing the problems. 80% of all grown-up dogs over the age of four have disorders connected to mouth problems. Dental plaque is the major problem but also tooth injuries are often observed. Smell

is often a good indicator of changes in the mouth: if you smell your dog's mouth and at the same time take a closer look, especially at the biggest molars, you will probably detect problems before they become serious.

Temperature: Dog's normal temperature is between 37.5 and 39.0 degrees Celsius. It is an advantage to know your dog's "normal" temperature, because if the dog has a "normal" temperature of 37.5 degrees, and then it rises to 39.0, there is probably a reason to worry. But if the normal "temperature" of the dog is 38.5, there may be no need to worry about the temperature of 39.0. One more thing to consider is that the temperature often rises when the dog is stressed, for example, at the veterinary office. That is why, it can be a clever idea to check the temperature at home, before going to the vet's. The temperature is taken by putting a digital thermometer in the dog's anus and holding it there until the thermometer makes a sound. Hold the dog under its belly, so the dog cannot sit down when you stick the thermometer in. It can often be an advantage to have two persons to do this, because the tail often gets in the way as well.

The dog's mucosa: The mucosa is supposed to be light red: you can observe it in the dog's mouth, or in the dog's eyes. It is easiest to observe it in the mouth of the dog. However, some dogs' gums are so dark that they cannot be used. In such case, you will have to use the mucosa in the eye. If the dog's mucosa gets paler or more coloured than normal, it is a cause for concern. If you press a finger on the gum and take the finger away, the area where you pressed is supposed to be filled with colour after 2 seconds. If it is not, you have to contact a veterinarian.

Pulse: The pulse rate will vary between 70-160 beats per minute. If we know our dog's regular pulse, we can also detect when the pulse is too slow or too fast. You can feel the dog's pulse on the inside of their hind legs.

Respiration: A healthy dog will breath both symmetrically and evenly. Their breathing frequency is 15 to 30 per minutes. You can observe it from the thorax movements.

When working in AAA, we recommend that you should have a weekly routine of checking your dog thoroughly. All the points above should be examined and any irregularities should be noted.

Taking your dog to work

No dog is allowed to work if it is not healthy. If you notice anything wrong with your dog, even minor things, like an ear that does not look/smell like it normally does, you should not take your dog to work.

- If there is something that just passes of itself, as sometimes is the case with diarrhoea, you can take your dog to work when the diarrhoea has stopped and the dog is feeling well again. The veterinarian should be contacted if the ailment has not stopped in a couple of days or when there is something more serious with the dog. It is not only because the dog may feel discomfort and the work is not pleasant for it; it is also because of the possibility of transmitting diseases between dogs and humans (see chapter on Risk management).

11.2.2. Injury prevention while working in AAA

Dogs can get hurt/injured while working in AAA. Here are some situations that can occur and information on how to prevent them from happening:

- Eating pills or other items from the floor:
 - Secure the setting before taking your dog inside
 - Teach your dog not to take food/pills from the floor
- Getting hurt jumping from a bed/sofa/chair:
 - Keep the dog in good physical condition
 - Help the dog down
 - Teach the dog to be calm when getting down
- Getting hurt while playing on slippery floors
 - Keep the dog in good physical condition
 - Use a dummy (that does not roll, not a ball)
 - Be careful playing on slippery floors

- Crush injuries
 - Be careful around wheelchairs
 - Pay attention to where the dog is placed (not in the front of a wheelchair, if it rolls just a little bit, the paw can get crushed)
 - Do not put very small dogs on clients' laps, the clients can hug them too hard

11.2.3. First Aid

If there is an emergency with our dog, we have to:

1. Secure the scene of the accident:
 - Calm down emotions, remove onlookers and take control of the environment.
2. Secure the dog: Remember that even the calmest dog during the accident can behave aggressively due to pain and shock. If the dog is growling, showing teeth or showing other worrying symptoms, its mouth must be secured with a dog muzzle, leash or a string before proceeding.
3. Provide first aid to the dog: We examine injuries and damages step by step: head, spine, skeleton (we examine it from head to tail), muscles, joints, skin (wounds, abrasions, bruises), chest.
 - Wounds: First of all, we need to assess the size and depth of the injury and whether it is a bleeding wound or not. Not bleeding wounds should be cleansed with water. It should be always verified if there are no foreign objects left in the wound, such as a piece of glass, thorn, etc. If a foreign object is in the wound, it should be removed. Hair around the wound should be shaved/cut in order to reduce the chance of infection and in order to facilitate hygiene. A dressing should be put on the wound and it should be secured from licking by the dog. If the wounds are open and deep, we should consult the veterinarian. We should put a sterile pressure bandage on open wounds in order to stop the bleeding. We should also try to immobilize the leg and secure the dog as the movement can lead to secondary damages. We should consider that, as a result of

the accident, the dog may have suffered pelvic or spine fractures, which might be unnoticed at first sight. That is why it is important to completely immobilize the dog and bring it as soon as possible to the vet's. The dog can have pain in their musculature and body even if they do not limp: if you recognize that your dog has pain in the body for more than a few days after jumping off a bed, playing on a slippery floor or getting bruised, you must consult a veterinarian.

- The dog eats pills or something else that is bad for their health
The most important thing is to get information about what it is that the dog has eaten, e.g., what kind of pills, before you call the vet or the “poison” information centre (*In Norway we have a poison information centre to call, when humans or dogs eat something that can be potentially dangerous*).

4. Transport of the dog to the veterinarian: After providing first-aid on the spot, it can be necessary to transport the dog to the veterinary clinic. We should use safe methods of transport, for example, by carrying the dog on a hard piece of plywood or blanket, if necessary. If it is essential, we should lay the dog on the right side and immobilize it during transportation. We could cover the animal in order to prevent cooling as injury may lead very quickly to heat loss. All the time we should remember that the animal might be in shock, therefore, the muzzle should be put on. Any attempt to carry the dog or change its position should be done with the utmost care in order not to worsen the existing injuries. Transport should be provided quickly but carefully.

11.2.4. Yearly checkups

A yearly check-up should be obligatory. Every dog working in AAA should have a health book, where the veterinarian can record facts on the dog's health. The veterinarian should be aware that the dog works in AAA. The vet has to verify if the dog has the vaccinations and deworming that is required in their country. The veterinarian should check the health status of the dog and also take a blood sample, if they find it necessary.

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Chapter 12

Risk management

Prepared by Line Sandstedt and Mari-Louise Asp

There is little research of the negative effects on AAA. Often the research in this area is focused on showing the positive effects. It is important to have a goal in what we are doing and to believe that the activity will create a better life for people involved in it. It is also important that animals are not subjected to unnecessary stress. And if we do not have any goal in the intervention, we should not get involved.

It is important that everyone working in the area of AAA with dogs is aware of the laws in their country regulating the way we treat, train and keep our dogs. We have to obey the laws and regulations each state provides for handling and taking care of dogs. We also have to obey the laws and regulations of the country where dogs may visit.

12.1. Clients

12.1.1. Respectful interactions

Not all clients are familiar with dogs and some of them do not know how to properly interact with dogs. The handler must give the client some education in how they are supposed to handle the dog. This is an important

issue, both for the dog and for the client. To make sure that the dog's welfare is taken care of, you need to know that the clients handle the dogs in a pleasant manner. To prevent injuries from occurring, the clients must learn to have a respectful relation to the dog in the intervention (IAHAIO, 2014). This is especially important in cases where the client is a child. Young children score poorly in interpreting a dog's body language and look mainly at the face of the dog to make their decisions (Lakestani et al., 2005). Jalongo (2008) found that dog bites were common among young children, but they could have been prevented with lessons which focus on helping children to show empathic behaviour towards dogs. It is important to teach children, prior to the activities, how to interact with a dog: if and when it is appropriate to approach a dog, how to play and have fun together with a dog, and how to react when they are afraid of the dog (Jalongo, 2006, 2008).

12.1.2. Unpredictable behaviour

Some clients demonstrate unpredictable behaviours, caused by their age or illness. It is, therefore, necessary that activities are attended by someone who possesses a high degree of knowledge of the clients/patients groups.

The handler must be together with the dog all the time, as the handler is responsible for the well-being of both the patient and the dog. The handler must not turn their back to the dog during the activities, in order to maintain control in case something happens (IAHAIO, 2014).

12.1.3. People who do not like dogs or are afraid of dogs

AAAs are not suitable for all clients. Some people have no interest in animals, and these people will not benefit from the activities (Friedmann & Tsai, 2006). Some people are very scared of animals, such as dogs, and the outcome of the activities will be negative for them. These people should not come in contact with a dog in AAA. If they want to cope with their fear of dogs, they should seek help from psychotherapists.

12.2. The Dog

To be able to take care of and to protect the dog, it is essential to have the knowledge and skills to be able to understand the dog's signals and act upon them. The dog will be safer and it will get support to do its tasks in the best way possible.

12.2.1. Dogs living at institutions

Most dogs do not benefit from living at institutions. There has to be someone to look after the dog all the time. If the dog is not looked after, clients can do the dog harm. Dogs are social animals and they do not leave the company of people, and a lot of dogs would rather suffer than be by themselves. The puppy/dog also needs security within the frame of a family. If the dog is owned by one of the employees at the institution, it can obviously come along. It is, however, essential that the dog is tested and found suitable for the work, and that the owner must act as a responsible handler at all times.

12.2.2. Working age

Dogs working in AAA should reach adulthood before they are put in a working situation. After the dog has achieved physical and psychological maturity, their personality will be fully developed.

Young dogs can be taken to institutions and the environment that the dog is supposed to visit later (see "Socialization"). It is important not to expose the dog/puppy to the clients, only people that can be fully trusted should be allowed to interact with the puppy.

It is hard to define the upper age limit, as dogs are very different. It is similar to human beings, some will retire at 60, others at 75. Some breeds will be very old when they are 7 years of age, while others are old when they are 12. The most important thing is that the owner is educated in reading their dog, so that they can decide, together with their veterinarian,

when the dog needs to retire. The owner has to be even more focused on the dog's health when the dog gets older. Old dogs are vulnerable to a lot of injuries and illnesses.

12.2.3. Dog bites/other "accidents"

Dogs can bite, scratch or bruise people, or people can fall over them. Clients/children can get "hurt" by the dog, and the dog's handler must put a lot of effort into preventing this from happening.

The American Veterinary Medical Association (AVMA) has identified several factors that determine a dog's tendency to bite. The factors that affect it include: heredity, early experience, later socialization, training and education, dog's health status, and victim behaviour (AVMA, 2001). The importance of domestic breeding environments and early socialization are well documented (Appleby et al., 2001). However, in a study conducted by Reisinger et al (2007), 66% of the dogs involved in bite injuries had attended obedience classes and 93% had been neutered. Herrison et al (2009) found that inappropriate physical punishment and discipline, used to reduce aggression, were trigger factors initiating dog bites. It is important that the education of a dog attending AAA is of good quality, with full understanding of appropriate behaviour. Aggression is an element of a dog's normal behavioural repertoire, and the dog's response will vary according to its individual "ladder of aggression" (Sheperd, 2002). In their study, Reisner et al (2007) discuss that pain and diseases in dogs increase the risk of biting. 77% of the dogs involved in the survey were suffering from an emotional disorder. It is essential that the dogs we are going to "work" with are healthy, both mentally and physically. Unfortunately, the majority of victims of serious dog bites and fatalities are young children (Sacks et al., 1996). Regarding AAA with children, there have been some bite episodes during some animal-assisted education situations. Often children want to hug dogs, and in AAE the child and the dog work close and it can be very difficult for the dog to have children in its intimate zone over a period of time (see chapter Communication).

Dogs that do not respect human intimate zones can inflict injuries on clients. Bruises, scratches and even falls may occur when the dog jumps on, bumps into or is reckless in their meeting with clients. For some clients, this behaviour can be really dangerous, e.g. a scratch of a claw can be very troublesome for old people. Their skin is like paper, so it tears very easily and the healing process is often very lengthy. To some extent, you can train a dog to respect these zones, but it can be difficult to have 100% control over its behaviour (it can be linked to the dog's personality).

12.3. Zoonosis

The most common objection to animal-assisted activities in institutions is the risk of infections (animal to humans, or human to animals), allergies and concerns around hygiene/cleanliness. The data in these areas are limited. The data from Huntington Memorial Hospital, Pasadena, California, show that there was no report of zoonotic infections during 3281 dog visits to 1690 patients over a period of five years (Jorgenson, 1997). Patients who are immunocompromised are at increased risk of zoonotic infections and that is why specific precautions are needed (Schantz, 1990). Hence, it is important to include screening criteria, both for patients and animals, infection control and general guidelines for reporting accidents and injuries, when considering AAA (*ibid*).

Some types of zoonoses are very hard to detect, because the dog can suffer from a disease without displaying any symptoms.

It is important that dogs participating in animal-assisted activities are vaccinated and dewormed. The handler has to follow the veterinarian regulations in respective countries. In Germany and in the USA, the veterinarians ban dogs which are fed on raw food (Barf) from AAA due to the increased risk of campylobacter and salmonella. In Norway, there are no regulations regarding vaccination against rabies, but we do recommend everyone working within the area of dog-assisted activities to have their dogs vaccinated against rabies. The dogs working in this field should also be protected against ticks, which can spread borreliosis to humans. It is

important that you take a comb and brush your dog's coat before you go for a visit, even if your dog has been vaccinated against ticks. This is because there can be loose ticks in your dog's coat which can be transmitted to the client.

Some forms of zoonosis include: salmonella and campylobacter mentioned above, rabies, staphylococci, streptococci, leptospirosis, microsporum canis, trichophyton.

Parasitic diseases include taeniasis, dog tapeworm, toxocariasis (ascariasis), scabies and giardia, and borreliosis.

12.4. Allergies

When we bring dogs to institutions, it is important to respect the challenges this entails and to try to prevent any issues as much as we can. By bathing the dog at least twice a week, we can prevent some of the dog-related allergens from spreading (Hudson et al. 2009).

12.5. Other risk factors

We have to take special care of people that are immunosuppressed and of those who have open wounds. To protect the dog from being a potential transmitter of disease, visits should not be allowed to persons who are infected with tuberculosis, salmonella, campylobacter, shigella, streptococcus group A, MRSA, ring worm, gardia and amoebasis (Kahn & Farrag, 2000).

Reducing risks

Things we can do to reduce risks, when bringing dogs into institutions:

Separate entrance: It can be an advantage to use an entrance that is not the main entrance. People that are allergic to, afraid of, and/or scared of dogs have to enter through this door.

Place for activities: The place for the activities should, if possible, be near an exit, so the dog does not have to go through the whole building.

Restrict the space the dogs are allowed in: The dog should be restricted to a place where there are no patients, nurses, doctors, relatives, visitors, who are afraid of, scared of, or who just do not want to have anything to do with the dog. Animals should also be restricted from food preparation and service areas

Washing hands: After the activities, make sure that everyone washes their hands. It is important to maintain good hygiene so that no allergens or infections are spread.

Clothes brush: Use a clothes brush to remove hair from client's clothes is an advantage. It is essential not to spread dog hair around the whole institution. Dog hair can be annoying for other residents, staff, visitors and last but not least for those who clean the place.

Washing/dry mopping the floor: Dry mopping the floor is also a way to prevent spreading dog hair in the institution.


Blankets and towels: By using clean blankets and towels you can prevent debris from the dog. Before you take the dog to an institution, you should always dry it with a towel. It is also a good idea to have a towel in the client's lap if the dog is to put their head in the lap of the client. If you want the dog to lie in a client's bed, you have to put a blanket on the bed for the dog to lie on.

Securing the environment: For dogs which eat everything, removing pills from the floor before the dog enters the room can save the dog's life.

Emergency plan

Animal-assisted activities should be part of risk management in the institution. It is important that there are procedures for handling unwanted incidents, such as bites, scratches, bruises and others. An incident report needs to be filled in and handed over to the institution. The organisation conducting the activities should also have a copy so that they can investigate and take precautions to prevent a similar incident from happening again.

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Conclusions

Prepared by Mirosław Grewiński and Wojciech Duranowski

In this handbook we have presented a model for the practice of AAA. It has been prepared by theorists and practitioners from several European countries. The handbook represents significant added value to the current knowledge in this field. An international team of experts over the past two years worked on defining the key elements of the model and on a common approach to standardization. Content structure adopted in this book reflects a jointly worked out position on the approach used by the research team.

“European standards of therapy dog training” is important for the professionalization of AAA. It is also important for the setting of minimum rules and criteria, which must always be used to ensure the quality and effectiveness of services which is AAA. The task of standardizing the social services which is AAA is not easy due to the fact that all EU Member States have different systems of social assistance (social care), and medical and therapeutic services performed. Many different kind of institutions carry out AAAs, although for the most part they are non-governmental organizations that specialize in this area. Standardization is the challenge of determining the level of minimum standards and rules, without which we cannot talk about AAA as the process of bringing a qualitative change to people with diverse social, psychological and health dysfunctions.

AAA standardization is important for all stakeholders in this process – especially for customers but also for trainers, social services, social policy institutions and decision-makers who allocate public funds to carry out this

service in systems of social and health policy. It is therefore important that these AAA standards be disseminated and implemented, and that they do not remain only on paper after the project.

We have reached the following conclusions:

1. AAA organizations operating in the European Union should put more focus on collecting scientific evidence for their activities. Publications of the AAA results will bring more knowledge and evidence both to support development of the discipline as well for the development of the activities
2. Creation of uniform and formal regulations for an official dog examination system for AAA. As of now there are no uniform rules of examination in any of the project countries. Standard examination system will provide a higher quality of service for clients, insuring that minimum requirements are met.
3. Animal Welfare aspects of AAA should be developed and disseminated towards both dog handlers and clients. Codes of ethical conduct including animal welfare issues should be followed by all the organizations which work in AAA. Dogs should always enjoy their work and cannot be treated by dog handlers or organizations as a way to make money.
4. Creation of uniform and registered job profiles within AAA for respective national professional bodies. The professions of dog handler and dog should be defined and minimum educational and experience requirements should be demanded. The creation of job profiles and educational paths will be a step towards professionalization of AAA.
5. Standards of service will facilitate the discussion of AAA as a social service financed by the state. In some countries of the European Union this is already possible, in others (such as Poland) still it is treated more as hobby and no public services in this regard are provided.
6. Lack of standards and clear professional norms, creates the danger that people without professional skills, code of ethics and understanding of animal welfare, will practise AAA and provide unsupervised activities to different sensitive social groups.

7. Projects such as “Therapy Dog Training – European Standards” are pioneering step towards professionalization of practice in the European Union. There are still many countries in the EU in which AAA is almost non existent and no clear rules are implemented. Others like Germany, Norway and Poland are working towards uniformization and standardization. However, we must understand that this process will take a long time and will require support and participation of different stakeholders: public, social, private and general public.
8. AAA is a typical non-technological social innovation which focuses on improvement of the life quality of different groups of people. These are mainly disadvantaged groups of people with disabilities, diseases, youth criminal offenders, elderly people and others who benefits from the animal-human relationship. As with every social innovation, it is important is to successfully scale up the innovation and implement it in mainstream policy as one of various social services which can be used for the benefit of society.

Thank you for reading this handbook!



Coordinator

Janusz Korczak Pedagogical University in Warsaw (JKPU) was established in 1993 by the Polish Association for Adult Education as a non-public University according to the Polish law. It has developed, since its establishing, a very strong regional structure which is its main feature. JKPU has a very long experience in project management. In total has been completed already more than 85 project including 10 international amounting to approximately 25 million EUR. In years 1993–2014 it has also published 113 000 copies of book on social policy, social work, social entrepreneurship and social innovation.

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Project partners

Animals for People Association (Poland) is an organization working in the field of therapy dogs since 2008. Organization is focused on three objectives: professional therapeutic classes involving dogs in a variety of institutions e.g. schools and special kindergartens, welfare houses, hospitals, senior houses and prisons, education classes involving dogs in schools and kindergartens, training volunteers and therapists. Association staff consist of pedagogues, psychologists and behaviorists with years of experience, both in working with dogs, as well as with various types of wards. Since 2014, the Association implements international projects with partners from Norway, Germany and Austria, working also with academic institutions.

Hunde begleiten Leben e.V. (Germany) is a non-profit association, which works in the field of human-animal-relationship. It is also an interdisciplinary association, comprising of individuals with expertise in ethology, psychology, public health and special needs education. The association has a lot of experience in professional education for Animal Assisted Therapy (AAT). Their further education program (60 ECTS) is certified by the European Society for Animal Assisted Therapy. Also, the association offers basic training for Dog Assisting Therapy Teams certified by the European Society for Animal Assisted Therapy. In addition, Hund begleiten Leben e.V. educates volunteers with their dogs in AAA.

The Norwegian Centre of Anthrozoology (AZS) works in the field of human-animal-relationships and is an interdisciplinary association, comprised of individuals with expertise in ethology, rehabilitation, public health and special needs education. AZS works within: consultancy and practice of animal assisted interventions, education, research and behavior modification and dog training classes. AZS has the leading expertise on human-animal interactions in Norway, and elaborates and provides animal assisted interventions (AAI) for different user groups. Together with the Norwegian University of Life Sciences (NMBU) they offer a university course in AAI, giving professional handlers theoretical and practical competence in AAI. In addition, AZS educates volunteers with their dogs in AAA in cooperation with the Norwegian Kennel Club and the Red Cross.

ABIF – Analysis, Consulting and Interdisciplinary Research (Austria) is an independent institute for social science research and consulting in Vienna. Since 1999, ABIF provides research and evaluation as well as the development of methods and curricula. Its focus point is on labor market and working world as well as adult further education and health topics. On national level, ABIF's clients are ministries, municipalities, the Austrian labor market service and other institutions. Additionally, ABIF participates in many European Union Projects, mostly in the area of further education. In the project "Therapy Dog Training – European Standards" ABIF is responsible for quality management, evaluation and monitoring.

Leader:



Partners:

