

PEOPLE & ANIMALS – FOR LIFE

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Table of Contents

Plenary Sessions	4
Plenary 1-9	5
Oral Sessions (Thursday July 1)	14
Oral 1-12	15
Oral Sessions (Friday July 2)	27
Oral 13-42	28
Oral Sessions (Saturday July 3)	57
Oral 43-66	58
Oral Sessions (Sunday July 4)	82
Oral 67-87	83
Workshops	104
Workshops 1-17	105
Poster Sessions	122
Poster 1-40	123

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Plenary Sessions

Abstract from Plenary speakers

Some We Love, Some We Hate, Some We Eat: Why It's So Hard to Think Straight about Animals

Harold Herzog

Professor, Western Carolina University

Our attitudes toward non-human animals are often morally incoherent. How can most Americans claim they support the aims of the animal rights movement, yet 97% of adults in the United States eat flesh? Why do we love cats and hate rats? Why are dogs treated as family members in some countries and eaten for dinner in others? In this presentation, I will use recent findings from anthropology, psychology, and brain science to examine why human interactions with other species are so fraught with inconsistency. Our thinking about non-human animals reflects a complex mix of genetic, cultural and cognitive factors. These include biophilia and biophobia, learning, language, and the tendency for human decision-making to rely on quick and dirty rules of thumb. I will argue that the social intuitionist model of moral judgment (Haidt, 2001) helps explain why our relationships with other species are so ethically messy. This theory holds that moral decisions involve two distinct and often conflicting processes. The first is rapid, unconscious and intuitive, while the second is slow, conscious and logical. According to this model, human ethical judgments, including our judgments about the use of animals, rely largely on moral emotions such as empathy, compassion, and disgust; logic serves largely to provide post-hoc rationalizations for our instantaneous gut-level moral decisions. Finally, I will discuss the limitations of relying on either pure reason or moral emotions in matters of animal ethics.

Reference: Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review*. 108, 814-834

Attitudes toward animals and animal welfare – a cross-cultural (international) comparison

Dennis C. Turner

ScD (Doctor of Science), PD (Private Faculty member, University of Zurich, Switzerland), Invited Professor (ERCAZ, Azabu University, Japan). President of IAHAIO since 1995.

Comparative studies of human attitudes toward companion, and other animals in different cultures are rare, of behavior towards them, even rarer. Our western-based animal protection movement is being exported to other cultures – often by occidental expatriates – without fully understanding the historical, cultural/religious, and economic roots of attitudes and behavior toward animals in those cultures. Furthermore, it assumes that those attitudes and that behavior can be changed. If one assumes that animal protection is necessary (which the speaker does), then that cause might be better served by using “local” arguments to reach “our” goals of reducing animal suffering and eliminating animal cruelty. The speaker has attempted to gain some understanding of adult attitudes in urban areas of 12* countries (data from 10 currently analyzed) which also represent different religious traditions, and to assess whether those attitudes change over time when persons from one country reside in one of the other countries (as expatriates). He has also observed behavior during chance encounters between people and animals on the street in three of those countries. From this ‘progress report’, it will become clear he has (we have?) only begun to understand the differences and similarities between the peoples of this planet with regard to animals. But it is a start to what he considers to be a worthwhile endeavor.

*Brazil, China, Great Britain, Germany, France, India, Israel, Japan, Jordan, Singapore, Switzerland, United Arab Emirates

Role of oxytocin in human animal interaction

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Oxytocin is a nine amino acid long polypeptide and the chemical structure is the same in all mammals. It is produced in the paraventricular and supraoptic nuclei of the hypothalamus and released into the circulation by neurons that project to the posterior pituitary and also from neurons that project to several important regulatory areas in the brain, where it may act by influencing the activity of more classical signalling systems e.g. serotonergic, dopaminergic, opioidergic, cholinergic and noradrenergic transmission. In addition to stimulating uterine contractions and milk ejection via the circulation, oxytocin exerts a multitude of effects via release of oxytocin in the brain. The central effects of oxytocin fall into several categories, the most important ones from the perspective of human animal interaction (HAI) being stimulation of social interaction, reduction of stress and other health promoting effects. Oxytocin stimulates social interaction by reducing anxiety and increasing trust in others and by stimulating prosocial interactive behaviours of several kinds. Bonding between individuals may be stimulated. At the same time the capacity to interpret social cues via all senses is increased. Oxytocin induces wellbeing and the level of pain and inflammation is decreased. Oxytocin decreases the activity in the HPA axis and in the sympathetic nervous system e.g. leading to decreased cortisol levels and blood pressure. In addition oxytocin optimizes digestion and stimulates anabolic metabolism and restorative mechanisms.

During mother infant interaction, oxytocin is released by the suckling stimulus during breastfeeding. In addition touch, stroking, light pressure and warmth activate sensory nerves from the skin and stimulate release of oxytocin in particular into the brain in both mothers (fathers) and infants and thereby these stimuli contribute to stimulation of social interaction, anti stress effects and stimulation of growth. Also visual, auditory and olfactory stimuli contribute to the release of oxytocin. Also other types of warm relationships involve oxytocin.

Oxytocin is also released during certain types of HAI. A beloved animal to which somebody is bonded to will serve as releaser of oxytocin, in particular when the animals are being touched and stroked. Some dogs seem to have a more general ability to release oxytocin in humans. The release of oxytocin induced during HAI may explain why e.g. dogs in some studies have been shown to stimulate social interaction and social competence, to reduce anxiety and increase trust in others, to improve mood and also to reduce cortisol levels and improve cardiovascular function e.g. by decreasing blood pressure. Such effects may in part explain the health promoting effects of having a dog or other animals.

Interestingly oxytocin levels also rise in dogs in response to contact with humans suggesting that they may also profit from HAI and attach and bond to humans.

Altogether these data suggest that HAI is important for human health via an influence of neuroendocrine mechanisms. It is therefore of importance to continue to conduct controlled clinical studies to more clearly demonstrate under which conditions HAI is health promoting. In this way therapeutic interventions based on HAI may be created, which may to some extent decrease the need for drugs or simply create a more positive rewarding and health promoting environment.

Animal Assisted Activity as a Social Experience: An Exploratory Study of Anti-violence Programs for Adolescents

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There is growing interest in the use of animal assisted activity (AAA) to reduce future aggression and anti-social behavior in “at-risk” children and adolescents. Despite the rapid growth of such programs in the US, they have garnered surprisingly little research attention. When studied, researchers have tried to assess AAA’s efficacy to help this emotionally troubled population, producing encouraging results unfortunately often based on poor research designs. Despite the importance of assessing whether AAA works, it is also important to gather baseline descriptions of the social processes underlying individual programs. Only then can future researchers verify and weigh which, if any, program features or processes, alone or in combination, make for greater program efficacy with particular target groups. Establishing this baseline calls for a focus on participants’ broad social experience in these programs, including, but going beyond, their contacts with program animals and whatever formal curriculum and structured plans they encounter. The nature of this experience and the belief that it transforms participants in socially desirable ways stems from each program’s culture, or what staff members believe is the right way for participants to regard and act toward animals, peers, and adults when in the programs. Since it is part of program culture, this staff perspective is not recorded but understood and enacted by those present, and passed on to new staff members through observation or verbal instruction about how they should view and treat participating youth. To describe the social experience that staff members want participants to have, an ethnographic approach was used to observe and interview 116 staff members and participating youth in five AAA programs for at-risk or incarcerated children and adolescents with a wide range of behavioral and emotional problems. Results describe the kinds of social experiences encountered by participants in these AAA programs, including their experience of buying into the programs, close relationships with animals and humans, softened hierarchical relations, perspective taking, easy successes, and manageable challenges. Also considered are the ways these experiences might facilitate desired program outcomes.

Ethological aspects of human-companion animal interaction

John Bradshaw

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Our conceptions of the behaviour of companion animals such as the domestic dog and cat have been heavily influenced by the science of ethology, and in particular by the phylogenetic method, which involves extrapolations between closely related species. The ancestor of the domestic cat, the African wildcat, is difficult to study, and ethologists have instead focussed on observing feral domestic cats. The results of their studies have been useful in understanding how cats integrate into human society, for example enabling the classification of their behavioural disorders as either “natural” and “pathological”. However, concepts such as “dominance”, borrowed from ethological theory rather than emerging from observation, may be less helpful when considering cat behaviour.

The contribution of ethology to understanding dog behaviour has been through comparisons with wolves, and unfortunately in the past these have been misleading. Traditional interpretations of the behaviour of the domestic dog are based on the hierarchical pack system that was once thought to typify the social behaviour of the wolf. Over the past decade, attempts have been made, by both wolf and dog ethologists, to dismantle this framework, based on several lines of reasoning: (1) that aggressive social conflict (“dominance”) within wolf-packs is largely an artefact of captive packs, and does not reflect the much more harmonious behaviour of natural, family-based groups; (2) that feral dogs do not construct wolf-type social groups; (3) that much of the behaviour of domestic dogs can be interpreted as originating from patterns of behaviour common to many species within the Canidae, thus pre-dating the evolution of the wolf; (4) from an animal welfare perspective, that the conflict-based wolf-pack model encourages the use of punishment-based training techniques, to achieve a presumed “status reduction”. It is arguable that the effects of domestication on the dog have been so profound that the phylogenetic approach is difficult to apply, and that instead, emphasis should be placed on ethological study of the dog itself, in the anthropogenic niches to which it has become adapted.

Animal welfare science in its cultural context

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How can we improve the lives of animals? This is the central question of animal welfare science, but the question (and the answers) need to be understood within their cultural context.

In Western culture, concern over the welfare of animals developed gradually over the last three centuries, partly because of scientific discoveries, first in anatomy, then in evolutionary theory, and most recently in animal behaviour. These discoveries narrowed the gap that people perceive between humans and other species, and this in turn contributed to the growing concern about animal welfare.

As attention to animal welfare intensified during the past 50 years, it became clear that different people, working from different culturally based assumptions, had somewhat different concerns. Some were concerned mainly over the basic health of animals; others were concerned that animals should have reasonably natural lives; and others were concerned mainly with the 'affective states' of animals such as pain, distress and suffering. Each of these concerns gave rise to scientific research including new lines of enquiry into animals' preferences, emotions, and responses to people.

Emerging programs of animal welfare standards, especially in agriculture, reflect the different concerns to different degrees. For example, both organic production (emphasizing naturalness) and high-health confinement production (emphasizing basic health) claim to support good animal welfare, but they are based on different assumptions and different science. Especially as animal welfare becomes a global issue, the challenge will be to improve the lives of animals in ways that make reasonable accommodation to the different areas of concern while also relating to the cultural values of the people involved.

Companion Animal Health and Longevity: Predisposing Factors

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Agria Animal Insurance, has, for the 120 years of its existence, been active in understanding and promoting the health and welfare of companion animals through partnerships with animal and veterinary organizations, university researchers and with animal owners, handlers and breeders. Agria data on both health care and life insurance claims have been used for numerous descriptive and analytic research studies on dogs, cats and horses that have been published in refereed journals. During the period 1995-2006, Agria insured approximately 200,000 dogs, 100,000 horses and up to 200,000 cats per year. The Swedish Kennel Club has a long history of examining the health of purebred dogs and developing disease prevention programs. Agria data and the Agria Dog Breed Profiles (www.agria.se/breedprofiles) have been an integral part of these efforts.

The findings from the insurance data highlight the marked differences between breeds in the type and occurrence of health problems and can help us to identify major issues in animal health and welfare. In addition to the obvious concerns we must have about health problems affecting the animals themselves, it is also important to acknowledge the impact on the owner. The premature death of a companion animal may have long term consequences. Chronic disease in a companion animal creates a stressful, complex situation for an owner or family who must make decisions with regard to their own, and the animal's needs. Understanding the rates of disease and death in populations of animals is a necessary underpinning of disease prevention strategies for both populations and individuals. This has been stressed in a recent UK report on health problems in purebred dogs.

The objective of this presentation is to describe the health and longevity of dogs, cats and horses, as based on the insurance data. We will look at age patterns of disease, differences between species, breeds and genders, causes of health problems and death and changes over time. The findings will be viewed in the context of Human Animal Interactions. Individual and societal changes in attitudes have impacted the utilisation of veterinary care, and this is reflected in the data.

Service Dog And Human Welfare: An Academic Approach To Securing Social Acceptance And Public Funding

Tomoko Hara Takayanagi

MD., Ph.D.

The purpose of service dogs is to promote independence and social participation for people with disabilities. By “service dogs” I mean guide, hearing, and other dogs that assist with functional tasks. This excludes therapy dogs. In the same way the use of canes is accepted to promote ease in walking, every society should accept service dogs for persons with disabilities. The use of service dogs is not a dog issue - it is a human right issue.

In Japan, people with disabilities are diagnosed by their doctors and receive specific certificates from public offices. They are then able to receive public funding for devices that aid their functionality and social participation, such as wheelchairs or orthosis. Service dogs should be funded the same way in every country.

There are three necessary factors to achieve greater service dog use. First is achieving social acceptance of service dogs. Second is securing consistent training programs for them. Third is funding the training and use of service dogs.

Guide dogs have existed in Japan for fifty years. But because there were no laws supporting them, many guide dog users were discriminated against.

My organization, Japanese Service Dog Resource Academy, conducted a survey in 1998 on service dogs. Four groups conducted the research:

1. Rehabilitation and welfare group surveyed the status, effectiveness, and limitation of service dogs.
2. Social and law group surveyed laws regarding service dogs and their societal acceptance level world-wide.
3. Veterinary group surveyed hereditary problems of Labrador retrievers such as hip dysplasia and retinal atrophy.
4. Dog training group surveyed training curriculums, percentage of certification, staffs' background, and funding. The Ministry funded to these research \$100,000 each year for 5 additional years to continue our efforts.

We submitted our findings to the Japanese Ministry of Health and Welfare. After reviewing our findings, the Ministry established an official committee in 2000 to study the issue further. They were particularly interested in mobility service dogs.

In 2002, Access Law For Service Dogs was established in Japan. This placed the issue of service dogs under human welfare and physical rehabilitation. The Japanese government began funding the training of service dogs.

Today, more medical professionals than ever before are interested in service dogs and their effectiveness. Many service dog training groups exist in each country, but most of them are funded only with private donations. As a result, some programs are well-funded and others are not. The use of service dogs should become a human rights issue and be publicly funded.

Calling their Horses by Names – Equine Facilitated Communication

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Children and Adults with Autistic Spectrum Disorders suffer from a severe communication and social interaction disorder. They produce repetitive behaviour patterns and their interests and actions are reduced. In nonverbal communication they miss out eye-contact, they often do not understand or show mimic and gestures. Their language and speech development can be delayed and severely affected.

On a horse all people enter into a nonverbal dialogue: the so called “movement dialogue” (Kestenberg, J.) which cannot be ignored. Movement analysis shows that there is communication from the very beginning: The combination of equine movement and sensory input, activate the (answering) sensory systems that are directly related to both receptive and expressive speech.

This presentation is based on a scientific long term study of the same subject (Tapfer) and will show that the movement dialogue is a natural part of mans communication development. It will be demonstrated how communication is facilitated by the horse and how it can be directed into human interaction/communication by the therapist. Long term case studies of both a child and an adult support the above hypothesis. These documents shown in short video-taped sequences will visualize the developmental process from being nonverbal to becoming verbal.



IAHAIO
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Oral Sessions

Thursday July 1, 2010

Japan's historical path in the human-animal relationship and a vision for the future

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In this presentation, we make a historical journey from the ancient to modern times in order to explore the transitions of the belief system that Japanese people had in regard to the relationship with nature and animals with an attempt to identify the common characteristics underlying throughout the history as the core ethnological identity. Then the intrinsic profile of Japanese people and culture in terms of human-animal relationship is outlined as common ground for further discussion.

And we turn our eyes to the present pathetic reality of more than 300,000 companion animals being killed at the public facilities every year. The question is what is it that causes such a misery in the modern society that seems to have all the enabling resources and technologies for the better world. The speaker presents his hypothetical interpretation about the cause and on top of that, his conceptual proposal for the better future and calls for discussion among the participants.

The historical journey starts with the prehistoric Jomon period of hunter-gatherers. In a quest for their animistic world in which people saw spirits and divinity all around in nature and animals, aboriginal culture of Ainu people is examined as an existing link to the ancient world. Our journey continues through historical epochs that had a strong influence on the formation of unique human-animal relationship; a large-scale migration of newcomers from the continent with rice agriculture succeeding the Jomon period, emergence of the unified nation by the ancestor to the Emperor family with its mythological religion of Shintoism, propagation of Buddhism, devastation of the century-long Warring States period, enforcement of the national isolation policy for over 200 years in the Edo period (Unprecedented animal welfare laws enforced by a Shogun in the 17th century is observed.) and its end with the subsequent westernization

Comprehensive survey of dog ownership in Japan

Katsuyasu Sakita, Yuri Shirai, Hideki Hayashidani, Kazuno Kita, Seinosuke Ohshima, Shigeru Sugano, Keiko Yamazaki, Masuo Ogawa

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Since 2007 the Japan Pet Care Association (JPCA) has conducted an all round survey of how dogs and cats live in the human community. The association certifies Pet Care Advisors (PCA) through a national network and as of March 2009 has 93,448 registered individual advisors. Utilizing this network of PCA's, questionnaires were initially distributed to dog owners throughout the country in 2008. The survey has been conducted every year against the same population since. The JPCA's project plan is to continue this survey over a 10 year period to analyze factors such as pet longevity, demographics and other human factors related to pet keeping and changing standards of pet care. This paper will outline the statistics for the 2008 survey for dogs. The initial number of questionnaires returned for 2007 was 2,894 dog keeping households. The 2008 survey covers 2,903 dog owners (male dog ; 1,186, female dog ; 1,383). The survey data include: 1. owners' characteristics, 2. dogs' characteristics, 3. foods, 4. others. The data obtained thus has shown some clear and interesting trends in dog-keeping. According to the distribution of the data classified by age, gender and neutering status, there were some interesting trends observed. In both gender, constituent ratio of neutering increased in elder age rapidly pointing to the fact that the longevity of neutered dogs was marked compared to intact dogs. This trend was typical especially in female dogs. According to the data 68% of the dogs carry an ID. However, a closer look at the survey details shows us that only 5.8% of the dogs are micro-chipped. An overwhelming majority of the owners, 78%, stated their main purpose of keeping a dog was as a "friend" or "family member". An analysis of the survey results has clarified problem areas where improvement is needed, as well as areas in which great changes have occurred.

Cultural variations in parenting practices to develop empathy in children through the child-pet relationship

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The cross cultural comparative study describes parenting and socialization practices in three different cultures (Japanese American, Native American and Islamic American) in developing empathy in children through children's relationship with their pets. The study found that parents voiced unique perspectives on the role of pets in their children's lives. Qualitative findings illustrate the important role parents and elders played in imparting values such as empathy, responsibility, caring for the lesser able and dependent and perspective taking through socialization practices that were unique to their culture. Empathy conversations, experiential learning, fostering relationship with their pets by providing small chores, particularly nurturing and physiological chores (e.g., food, water, potty breaks) and direct instructions of pet needs were some of the different parenting and socialization practices in the three cultures. Thus, in these three cultures, specific socio-cultural and religious beliefs and values appeared to influence parenting strategies. Pet-related parenting practices varied widely, even when parents in different cultural groups appeared to have similar aims in fostering pro-social behavior.

Aspects of health, physical/leisure activities, work and socio-demographics associated with pet ownership in Sweden

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Background: Studies have verified the positive significance pets have on their owners' health, especially on those who form a bond with their pet. For example, longitudinal studies from Germany and Australia, based on national general populations have shown that pet ownership results in fewer doctor visits. Other studies, by contrast, have demonstrated that pet ownership may be associated to negative aspects on health (e.g. depressive symptoms or poorer physical health).

Aims: The aim of the work presented here was to explore differences between pet owners and non-pet-owners concerning aspects of health, physical/leisure activities, work and socio-demographics.

Methods: The study was based on nationally representative data from the Swedish population (n = 43,589). Associations between pet ownership and background variables were investigated using logistic regression analysis. **Results:** A total of 39,995 respondents were included in the analysis (non-pet-owners = 25,006; pet owners = 14, 989). Pet ownership was associated with both positive and negative aspects of health, physical/leisure activities and socio-demographics. Pet owners had better general health but suffered more from mental health problems than non-pet-owners. Their leisure activities involved a greater interest in nature life and/or gardening than those of non-pet-owners. The logistic regression analysis showed that people who were self-employed, in the age range 35 to 49, of female sex, and suffering from pain in the head, neck and shoulders were more likely to own a pet than others. People physically active at a level sufficient to have a positive effect on their health more often owned a pet than people who were less active.

Conclusion: Pet owners differ from non-pet-owners in aspects of socio-demographics, health, physical/leisure activities and work situation. This study, based on a general regional population in Sweden, showed differences of both a positive and a negative kind between non-pet owners and pet owners concerning aspects of health, physical and leisure activities, and work situation.

Associations between oxytocin and cortisol levels and the relationship between dog owners and their dogs

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The aim of the present study was to explore possible correlations between female dog owners' evaluation of the relationship with their dog and the oxytocin and cortisol levels in both the owners and their dogs. During an interaction experiment 10 female owners of male Labradors filled in the Monash Dog Owner Relationship Scale (MDORS) describing the relationship with their dogs. In addition, 10 blood samples were collected simultaneously from dog owners and dogs during the interaction experiment.

Blood samples were analysed for oxytocin and cortisol by enzyme-linked immunoassay.

The physiological results have been described elsewhere (see "Short-term interaction between dogs and their owners- effects on oxytocin, cortisol, insulin and heart rate").

Mean values of oxytocin and cortisol levels based on all samples collected from each owner and dog were calculated and these values were then correlated with the answering scores obtained from the different items in the MDORS. The dog owners' oxytocin levels correlated significantly with items regarding positive feelings and closeness to the dog whereas their cortisol levels correlated significantly with items regarding negative feeling towards their dog. The dogs' oxytocin and cortisol levels both correlated significantly with the owners' answers to items regarding positive attitude toward the dog.

In conclusion, oxytocin and cortisol levels in both owners and dogs were related to the owners' perception of her relationship with the dog. Whether the hormonal levels and relationships between them and the owners' attitude represent characteristics of the dog or the owner or are consequences of a long term interaction between the two cannot be concluded from the present data and need further investigation.

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The relationship between owner sensitivity in dog task solving and dog attachment security in the strange situation test.

Jill White, Anne McBride, Edward Redhead

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The study aims were twofold: to determine if owner behaviour affected dog exploratory behaviours in a dog task solving experiment, and, secondly, if this was related to dog attachment security in Ainsworth et al.'s (1978) Strange Situation Test. Dogs (n = 52) were clustered (K = means cluster analysis) into 4 attachment groups (Secure, n = 15; Insecure/Anxious, n = 11; Insecure/Passive, n = 15; and, Avoidant, n = 11). All occurrences of owner behaviour: control of dog (restraining, grabbing paws), ordering and praise were measured. Owner support was measured from 1 (non-supportive or dissociative) to 7 (involved, yet sensitive to dog's task solving attempts). Owner quality of assistance was measured from 1 (low quality - high interruption of the dog's problem solving attempts and invasive behaviours) to 7 (high quality - low interruption, low physical control) (per Matas et al. 1978). The results found that owners of secure dogs were significantly less controlling and more sensitive in the provision of support. These secure dogs were significantly more orientated and intensely involved in the task than insecure dogs. In contrast, high levels of owner control were significantly related to avoidant dogs, which had the lowest levels of task intensity and orientation. In conclusion, positive owner/dog interaction based on sensitive owner support and non-invasive assistance was related to activation of the dog's exploratory system, and this was significantly related to the secure dog cluster. In contrast, interactions based on low levels of owner support, highly controlling and invasive owner behaviour were related to lower levels of exploration, and the avoidant dog cluster. These results suggest that a strong dog/owner bond results from gentle, humane handling and the opposite, invasive and controlling handling is more likely to produce dog avoidance and non-activation of the exploratory system.

Attachment and perceived social support from cats and dogs: sources of variation amongst older and younger adults

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This study surveyed 101 cat owners and 156 dog owners, aged 30 to 94 years, to explore potential sources of variation influencing the extent to which existing pet owners report feeling attached to their animals, and the social support they derive from them. Participants were recruited via age-group targeted telemarketing lists and veterinary surgery client lists. Following an initial telephone interview to establish basic socio-demographic information, volunteers who were either cat owners or dog owners were sent postal questionnaires. They were asked to report on levels of attachment to their pet and the perceived social support they derived, both from other people (friends / family) and from their pet. They also completed a sub-scale of the Interpersonal Sensitivity Measure (IPSM; Boyce & Parker 1989), designed to assess a personality trait associated with willingness to form trusting and secure social relationships with others. For the whole sample, presence or absence of another adult in the home was not associated with respondents' relationship with their pet. However, people who had no children living in their home were more attached to their pet than those who had children living with them ($F=6.23$, $p<.05$). These respondents also reported deriving relatively more social support from their pet than from other people ($F=4.82$, $p<.05$), as did participants who reported higher levels of interpersonal sensitivity ($F=17.60$, $p<.001$). For older respondents (60+yrs) who did not have any children living with them, the size of their broader social network (inc. contact with friends, neighbours, grown up children nearby) was inversely related to attachment to the pet ($F=4.40$, $p<.05$). We conclude that people's attachment to their cats or dogs, and their use of these pets for social support, can vary significantly according to personality and to the presence of existing human social relationships both within and outside the family home.

The relationship between dog owner frightening behaviour and dog attachment security

Jill White, Anne McBride, Edward Redhead

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The popularity of television dog trainers, who often use inhumane methods employing violence in behaviour modification, is worrying for many human/animal bond and welfare scientists. With this in mind, the aim of this study was to determine if owner frightening behaviour (FR) (Hesse & Main, 1999) predicted dog attachment security in Ainsworth et al.'s (1978) Strange Situation Test. Owner frightening behaviour (FR) is comprised of threatening, frightened, dissociative or disorganised behaviours. Owner (n = 52) FR behaviour frequencies (number of instances) and dog attachment behaviours (secure base effects, proximity seeking, comfort seeking, distress, latency to play/explore) were collected from video analyses. Four clusters (k-means Cluster Analysis) were revealed: Secure (n = 15), Insecure/Anxious (n = 11), Insecure/Passive (n = 15) and Avoidant (n = 11). The results found that 13 (25%) owners displayed FR behaviours: 4 threatening; 1 frightened; 6 dissociative; and, 2 disorganised. In a chi square analysis, the relationship between dog security and owner FR was significant, $p < .05$. Dogs were 6.75 times more likely to be scored as Insecure (Avoidant, Passive or Anxious) in the Strange Situation if their owners exhibited FR behaviours than Secure. Owners of Avoidant dogs are five times, owners of Passive dogs four times, and owners of Anxious dogs three times more likely to use frightening behaviours than owners of Secure dogs. No owners of Secure cluster dogs used FR behaviours in this study. Therefore, dog attachment insecurity is associated with the owner use of frightening behaviours. In contrast, attachment security is characterised by the absence of these behaviours. These results suggest that a strong dog/owner bond results from gentle, humane handling and that frightening or aversive interactions are more likely to produce dog avoidance and non-compliance as well as compromised welfare.

Implementing a community fitness program involving shelter dogs: Issues and outcomes

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Program Description

The presentation will describe a collaborative community dog walking program aimed at increasing physical activity among children and adults. A further goal of the program is educating the public about good nutrition and the health benefits of walking. Participants come to the animal shelter weekly and walk with shelter dogs. This forms a commitment to exercising the dogs while getting exercise themselves. The logic model of the program will be discussed from a public health standpoint. In developing such a program, the important role of collaboration across participating entities (including governmental departments related to physical activity and health and animal shelters) will be described. Additionally, issues associated with implementing such a program will be addressed. These include behavioral screening of the dogs, acquiring needed resources, coordinating participant registration, organizing personnel and materials, ensuring participant safety, forming ongoing relationships with participants, and appropriately measuring participant and animal outcomes.

Findings

The Walk a Hound, Lose a Pound program, ongoing at University of Missouri, USA is the model for the presentation. The program began in 2007, and since has had 162 participants (Mean age=40 Range=19-85). Participants have been found to significantly increase their Physical Activity Stage of Change (difference scores compared from pre to post and $p < 0.001$, two sided). The mean score for a participant group was 4.57 on the pretest and 5.01 on the post-test. This means that participants went from doing vigorous exercise less than 3 times per week or moderate exercise less than 5 times per week to doing 30 minutes a day of moderate exercise 5 or more days per week for the last 1-5 months. Participant comments indicated that they enjoyed helping the shelter dogs to get needed exercise, that this was an easy way for them to also exercise, and that they were motivated to come each week "for the dogs". Given the US obesity epidemic, programs such as this one may be one promising method of facilitating physical activity. The perceived indirectness of the exercise (it was focused on the dogs and not the people) may be a factor in establishing participants' motivation to continue.

The UK's first dog-human activity trail: increasing fun, health and fitness for people and their dogs

Stephen Jenkinson

Highlands and Islands Pet Behaviour, UK Access and Countryside Management, Orkney, United Kingdom

Paddy Harrop

Forestry Commission, Recreation and Public Affairs Manager, Bristol, United Kingdom

The UK's first dog-human activity trail has improved human and canine health by turning a passive dog walking area into an outdoor gym for people and their pets.

Human and canine obesity are increasing in the UK, at a time when there are fewer places than ever where dogs can be exercised, and growing calls for even greater restrictions on pets in public places. Whilst funding for improving animal welfare is limited, increasing human health is high on the political and funding agenda, with a Government target for people to take 30 minutes of exercise, 5 or more times per week. An opportunity was thus identified to attract public funding to both reduce canine obesity and increase human health, by better exploiting carers' inherent desire for their dogs to have safe, enjoyable exercise every day.

Using funding from national Government and a canine organisation, a 2.5km dog-human activity trail was built in spring 2008, in a community woodland near a large urban conurbation in north-east England. Surveys undertaken at the end of 2008 found that because of the activity trail: 60% of visitors were now more active; 69% were more sociable with other dog carers; and 76% felt more welcome. 36% of carers said their dogs had become healthier or lost weight, and 22% were now more likely to participate in dog sports, like agility.

The trail's 7 activity stations were inspired by dog agility obstacles, adapted to make them accessible and safe for all dogs and carers, irrespective of their stature, mobility or degree of training. The activity stations were also designed to be inexpensive and straightforward to construct from local timber, minimising the need for maintenance and safety inspections. Attractive information panels at the start of the trail, and at each activity station, encourage dog carers to interact with the facilities. The panels also provide information on responsible dog care and environmental awareness.

This presentation will inspire and assist delegates to develop their own dog-human activity trails, and guide them to additional sources of on-line support. Photographs and a 2-minute professional television news feature will be used to illustrate the project.

The effect of dog acquisition and dog loss on recreational walking

Hayley Christian, Billie Giles-Corti, Matthew Knuiman

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Evidence of the potential for dog ownership to facilitate higher levels of physical activity and thus improve owner's health status has been limited to date because it is mainly cross-sectional. This study examined the effect of dog acquisition and dog loss on minutes/week of walking in participants taking part in the RESIDE study.

Longitudinal changes in walking, socio-demographic, environmental and intrapersonal factors associated with: a) dog acquisition in non-dog owners at baseline to 12 months follow-up (n=773); and b) dog loss in dog owners at baseline to 24 months follow-up (n=539) were examined. The Dogs And Physical Activity (DAPA) tool was used to measure the amount of dog walking undertaken, dog walking destinations and individual and environmental factors associated with dog walking behaviour.

Overall, 12% of baseline non-owners had acquired a dog at follow-up; after adjustment, walking increased by 30.8 minutes/week (95% CI: 7.39, 54.22; $P \leq 0.01$). At follow up, 24% of baseline dog owners had lost their dog; after adjustment, walking decreased by 43.7 minutes/week (95% CI -16.04, -71.44; $P \leq 0.01$). Perceived social support and motivation provided by a dog to walk, and the presence of a neighbourhood park with dog-supportive infrastructure (dog litter bags and dog-related signage) were positively associated with regularly walking with a dog. Dog-related factors measured (size, number owned, health status or attachment level) were not associated with dog walking.

This study provides longitudinal evidence to suggest that dog acquisition leads to an increase in walking and that dog loss leads to a decrease in walking. It is likely that dog acquisition facilitates increased physical activity through the provision of motivation and social support for walking. Furthermore, access to local parks with dog supportive infrastructure appears to encourage greater levels of dog walking. Considering almost 40% of households in the U.S. and Australia own a dog, the contribution of regular dog walking to physical activity could potentially increase the proportion of the community who are active and have a positive effect on the health and well-being of owners and their furry four-legged companions.

Weekly urban dog walking sessions

Yannick Thoulon

Trabouldogs, Lyon, France

Geneviève Bernardin, Dominique Lemesle

Grand Lyon-Communauté Urbaine, Lyon, France

It would appear that man's desire to live in cities is growing irreversibly. However, despite the fact that the dog's normal environment is to be around people, dogs and many other animals live in cities in which architects, urban planners and other key urban decision-makers provide no specific facilities for these residents. Dogs and many other animals living in cities are viewed through the prism of the problems that they create (waste, noise, potential aggression, etc.). One long-term response to this problem was to set up a series of weekly urban dog walking sessions, involving around 75 participants, both dog owners and non-owners, including children with no pets at home. This paper comes after 500 such sessions and in-depth research, and focuses on the health, behavioural, educational, psychological and planning aspects of life in the city.

Walking is important to the health of both people and dogs, and engaging in this activity together creates interactions between the two, as well as unexpected links between people, overcoming any rigid notions of race and social class. This situation generates new conditions for interaction and communication, develops curiosity and encourages those taking part to relive the experience and share it with other participants. This twice weekly meeting, both with participants and passers-by, has triumphed over fear, complaints and prohibition and is now a regular fixture in programmes and schedules.

In light of this new relationship between people and dogs, will they help to build a new urban living space and improve life in the city? This aspect should form part of the interdisciplinary approach to life in the city, both now and in the future, as part of an "ANIMALS IN TOWN" POLICY.



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Friday July 2, 2010

An innovative method to study human-pet interactions during the first encounter

Marine Grandgeorge, Martine Hausberger

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Animals - especially pets - belong to our environment. Whereas studies of human-pet relationships mainly focused on the beneficial or therapeutic value of the pet to humans (e.g. increase self-esteem; help the cognitive and emotional development, be a social substitute), ethological approaches remain rare. It is important to consider a relation in a developmental view in which the encounter between human and animal is the first step. To fill up this lack of study, we developed an innovative standardized observation of the spontaneous encounter between unfamiliar pets and people at subject's home. We hypothesized that people behave differently - according both to their own characteristics and the pet's behaviors - highlighting behavioral profiles. To illustrate the method, we focused here on the approach of an unfamiliar guinea pig (*Cavia porcellus*) by 59 children (6-to-12-years-old, 32 girls and 27 boys). As expected, different profiles were defined: confident, expressive, fearful and careful profiles and children's behaviours were modulated by their characteristics too (sex, age...). Our test gives valid, reliable and repeatable method for understanding the encounter between an unfamiliar pet and people, both at adults and children age with typical or pathologic development. In conclusion, it must be widely used to adapt the animal assisted therapies to the patient's characteristics and to highlight unique social characteristics both in typical and pathologic people.

Analysis of human-dog communication in motion

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Many studies focused on the dog's ability to respond to human signals during relatively static procedure. Little is known about their influence in dual tasks performance involving simultaneously the control and correction by the handler of dog's direction and the detection/recognition of handler's signals by the dog. To identify the relative role of those signals to guide dog's displacements among obstacles, forty handler-dog teams ran from a flexible tunnel to one target obstacle (out of 5 possible obstacles) in 2 conditions (with verbal commands allowed to handlers -10 runs WithVC- and without verbal commands -10 runs WoutVC-). The team's rate of success (percentage of target obstacles jumped per condition); the duration of dog's gazing towards the handler, the obstacle or elsewhere; the number of barks and of physical contacts with the handler; the duration of handler's gazing towards the dog or the target obstacle; the duration of pointing the target obstacle; the number of hand noises (clapping, fingers clicking); and verbal cues (onomatopoeia, words) were analysed (ANOVA with Tukey post-hoc comparisons, Multiple Correspondence Analysis, Wilcoxon rank test). The expertise of the dog was also taken into account (i.e. novice, intermediate, advanced, expert). There was no effect of the repetition ($\chi^2 = 0.83$, $p = 0.064$) nor of the target obstacle ($\chi^2 = 0.16$, $p = 0.69$). The success rate was higher in WoutVC condition (mean: 86,75% of success) than in WithVC condition (77,25%). This effect was observed whatever the dog's level of expertise but was significant in novice and intermediate dogs (resp. $p < 0.01$, $p < 0.05$). MCA showed that successful jumps were strongly associated with handlers looking and pointing at the target obstacle more than 50% of the time and with dogs mainly focusing on the target obstacle without barking. In WoutVC those behaviours were significantly more observed in handlers (gazing and pointing: $p < 0.05$) but not more observed in dogs (gazing and barking: $p > 0.05$). As the practice of Agility is suggested to prevent and treat some behavioural problems in dogs, these results offer a better understanding of dog-owner communication in motion.

Effects of gender and personality on performance in human-dog dyads in an agility parcours

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If humans and dogs are real social partners, their interactions and common performance in an operational challenge should be affected by the personalities of the partners and their sex/gender combination. To investigate this idea, we collected data at a fun-agility competition in Steyr (Upper Austria) in May 2007. Twenty-seven human-dog dyads (11 male and 16 female owners; 8 male and 19 female dogs, most of them of the dog breed "Eurasier"; www.eurasier-club-austria.at) were videotaped during mastering a fun-agility parcours as a team. Saliva samples for the analysis of cortisol and testosterone were taken before and after. Questionnaires answered by the owners included the NEO-FFI personality test and an attitude-towards-dog scale. Dog personality was observer-rated after the competition. Videos were behaviour-coded with THE OBSERVER (Noldus). Principal component analysis (PCA) served to extract dimensions from the attitude questionnaire and data were analysed with GLMs. We found that owner gender and dog sex as well as personality of both affected dyadic performance in the agility parcours and their salivary cortisol. For example, male owners controlled their dogs more by holding them than female owners and male dogs were more controlled by holding than female dogs. Also, the more open (FFI dimension 3) the owners, the longer it took them to complete the parcours and the higher was their cortisol increase.

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Describing the ideal Australian companion dog

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Dog breeds vary considerably in physical and behavioural characteristics. This is primarily in response to selective breeding aimed at creating dogs suitable for various working roles. Nowadays, few breeds undertake the work they were once bred for; but are kept primarily as human companions. However, thousands are surrendered annually to shelters because they display behaviour deemed inappropriate by owners. This suggests that all dogs may not be well suited to being human companions. To identify which physical and behavioural traits are considered important for companion dogs, 877 volunteers (79.8% female) were recruited via the media to complete a survey (online or printed) about their 'ideal' dog. Canine characteristics rated as important included medium sized, short haired, de-sexed, safe with children, housetrained, friendly, obedient, healthy, affectionate and easy to manage. Desirable behaviours were grouped using Principal Component Analysis into five factors, labelled: calm/compliant; sociable/healthy; energetic/faithful/protective; socially acceptable; and non-aggressive. Independent samples t-tests revealed that women preferred a dog who is calm/compliant [$t(870) = -2.33$, $P = 0.02$], sociable/healthy [$t(870) = -2.57$, $P = 0.01$] and non-aggressive [$t(870) = -2.67$, $P = 0.008$] while men preferred a dog which is energetic/faithful/protective [$t(870) = 3.09$, $P = 0.002$]. Furthermore, non-dog owners rated the energetic/faithful/protective factor [$t(874) = 2.65$, $P = 0.008$] as more important than dog owners. Overall, there was a consistent preference for characteristics associated with what might be called 'amicable' dogs; those which are easy going, friendly, non-aggressive, relaxed and sociable. Determining whether dogs consistently display these characteristics and whether they are heritable or learned, will enable breeders, owners and trainers to make more informed selection and management decisions. The ability to breed and train dogs best suited to modern demands has potential to increase owner satisfaction, reduce the incidence of problem behaviours exhibited by companion dogs and improve dog welfare.

Relational factors affecting dog attachment to human partners

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In a pilot study with 22 owner-dog dyads we investigated the effects of a number of factors on dog and owner behaviour and interactions in different test situations. These factors were personality of owner and dog, owner gender, quality of owner-dog relationship and attachment. At present, we were particularly interested in how dog attachment was related to these variables. In the course of three meetings owner-dog behaviours and interactions during test situations were observed and video-taped for behaviour coding. Owner personality was measured by NEO-FFI, dog personality was extracted from rating scales by PCA, human-dog relationship and attachment was extracted from questionnaires by PCA and saliva samples were collected from owners and dogs to measure cortisol and testosterone levels in the context of test situations and during control days. To investigate dog attachment, we asked the owner to focus at pictures at walls and note associations to each of the pictures; this distracted the owner's attention from the dog. With GLMs we found that the owner personality dimension "neuroticism" was positively related to the dog-regulated distance to owner, whereas dog personality axis "vocal and aggressive" was negatively related to this parameter. The higher the owner in "neuroticism" and the lower in the other four NEO-dimensions, and the more the owner considered the dog as a social supporter and understanding partner (attachment PCA-axis 1 and 4), the more often the dog approached the owner. Our results provide support that dogs' attachment to their owners is strongly affected by personality and owner attachment. Funded by IEMT Austria and MARS-Waltham. M. W. was supported by a research fellowship of the University of Vienna (F-403 Forschungsstipendium).

Advantages of incorporating nontraditional species in animal-assisted interactions

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By far the majority of animal-assisted interactions incorporate dogs and horses. While these species are highly interactive, trainable and predictable, the behavioral repertoire of different species can offer significant opportunities to improve the therapeutic capacity of individual sessions.

This practical presentation will examine and compare how the innate behaviors of animals other than dogs and horses can be effectively harnessed to support and improve interaction goals. For example, the eagerness and persistent energy of a goat can help to engage and focus an individual diagnosed with Asperger's Syndrome, while a chicken's instinctual feather preening can have a calming effect on anxious individuals.

Through the use of video clips of actual session footage, observe how the innate social behavior of animals such as chickens, goats and rabbits can make a significant difference in participant outcomes. Participants in this session will have an opportunity to learn:

- Species specific social structure, basic behavioral repertoire, and capacity of goats, chickens, and rabbits for animal-assisted interactions
- How to distinguish between generalized species specific traits and the suitability of individual animals for animal-assisted interactions.
- How to intentionally harness the behaviors of each species to optimally support participant goals.
- Contra-indications and concerns related to the incorporation of different species in animal-assisted interactions.
- Session design techniques that best utilize a species' innate behaviors to enhance session impact.
- Techniques to determine which species is the most optimal for individual participants and why.

The pet connection: the role of pets as facilitators of social interactions and social capital

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There is growing interest across a range of disciplines in the relationship between pets and health, with a diversity of therapeutic, physiological, psychological and psychosocial benefits now documented. The majority of studies to date have focused on the 'one to one' benefits accruing from interactions with pets, but there is growing interest in the social and relational dynamics that may be influenced by the presence of pets in our lives and communities.

This paper explores the potential role of pets as facilitators of social interactions and social capital within neighbourhoods and communities, both among pet owners and the broader community. Mixed research methods have been used to investigate this topic over the last 7 years at the University of Western Australia, including qualitative (focus group) and quantitative research (community survey). The paper also draws on some 'real world' case studies that illustrate the role pets can play in helping to strengthen the social fabric of local communities.

Much of the evidence gathered in our research serves to 'validate' the anecdotes of many pet owners across the life-course and around the globe. In particular, pets were found to act as a lubricant for social contact and interaction and pet owners had elevated perceptions of suburb friendliness. Even among people who didn't own pets themselves, pets were seen as a conversation ice-breaker and to contribute positively to people getting out and about in their community. Pet owners were more likely to exchange favours with neighbours, to be involved in community issues and to have higher levels of social capital. Pets also appeared to ameliorate some determinants of mental health, such as loneliness.

The connection between pets and social interaction and social capital suggests that the domain of a pet's influence can extend beyond its immediate owner and home turf, to have a positive ripple effect on the broader community. Given growing concerns in many countries regarding the erosion of community and social capital, pets are emerging as valuable and positive features in community and neighbourhood life.

Ajzen's theory of planned behaviour: its practical application to increase responsible behaviour by dog walkers in parks, greenspaces and the countryside

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In 2005 changes in the law gave local councils in England and Wales additional, extensive powers to restrict where dog carers could provide their pets with outdoor exercise and social interaction, especially off-lead. Central government recommended these restrictive powers should only be used in an evidence-based and proportionate way, that balances the needs of people with and without dogs. However, excessive restrictions have been imposed by local councils, as a disproportionate reaction to a small number of incidents of insufficient dog control, and pressure from anti-dog interests. A partnership of central and local government bodies and a canine organisation, resolved to investigate why unwanted behaviour by dog walkers occurred, and thus develop more equitable and effective ways to influence their behaviour. Attention turned to Ajzen's Theory of Planned Behaviour (TPB) as this had already been successfully used to promote healthy lifestyles and the recycling of domestic waste. Two major academic studies were commissioned to identify dog walkers' underlying attitudes, social influences and control beliefs about their pets. TPB identifies the latter three factors as the psychological components that predict actual human behaviour in a social setting.

The results were then the catalyst for several innovative site-based initiatives, that use the human-animal bond to minimise conflict where dogs are exercised, without relying on negative and confrontational enforcement-based approaches. For example, on one site the amount of dog faeces left behind was reduced by 82%, dog attacks on grazing farm animals were eliminated and unintentional damage to an Iron Age Hillfort was significantly reduced.

This presentation will introduce TPB's generic principles and give inspiring practical examples of how this use of applied psychology can minimise negative impacts and unhelpful perceptions of dogs and their carers in society. As TPB's principles can be applied in any country, this presentation will give delegates a powerful and transferable psychological framework, that can be positively used in many social aspects of managing, influencing and promoting the human-animal bond. Additional on-line sources of support and case studies will be illustrated.

The human-animal relationship: a place in health psychology

Ruth Billany

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Over the past thirty years, research exploring the symbiotic interaction between humans and animals is gaining credibility within the academic community. Although diverse disciplines from anthropology to zoology are now actively involved in this arena, research into the salutogenic effect of the human-animal relationship has been marginalised by the discipline of health psychology. The two aims of the present study were: to critically analyse the research publications exploring the human-animal relationship; and to explore the potential for the interdisciplinary strengths of health psychology to achieve new insight and provide a superior position to understand the human-animal relationship. The findings of a meta-analysis of dissertations reveal a paradigmatic inadequacy and a lack of a comprehensive theoretical foundation on which the studies are based. Rigorous quantitative experiments are needed to provide health professionals with evidence based practice, however, these reductionist methods alone may not reveal the complex set of variables within the human-animal relationship. In conclusion, there is a value in well designed qualitative research which includes listening to the rich experiences of individuals, groups and communities. The field is emerging as a public health issue and is presented as an interdisciplinary approach with no scientific rigour or common research methodology. If health psychology is a dynamic discipline, a true hybrid with eclecticism, then it could be the place for academic research into the relevance of animals to human health. Economic influences are paramount during the current global credit crunch and there is cogent evidence that our relationship with animals might reduce the national health expenditure.

Expanding the person-in-environment perspective: Animals and ecosystems as predictors and moderators of health and disease

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The symbiotic relationship between humans and animals may be understood through many roles animals play that impact upon human wellbeing. Their service includes acting as sentinels of violence and stress (Ascione 1999), as guideposts for cultural understanding and communication (Dell et al. 2008), and as bio-indicators of eco-system health (Rabinowitz et al. 2009). Through these roles animals also contribute to health knowledges within human and animal medicine, and hold potential within the social sciences for understanding the significance of the reciprocal relationship between humans, animals and the environment (Rock et al. 2009).

Social work is a natural space for the exploration of animal potentiality in contributing to human wellbeing. The profession's person-in-environment perspective, a main practice construct, premises understanding of the reciprocal relationship between humans and their environments (Besthorn & Canda 2002; Besthorn & Saleebey 2003). Yet in practice the perspective has emphasized the social environment and neglected the influence of animals and natural ecosystems as contributors to both wellness and disease (Coates 2003). Exploration of other frameworks may be useful in reconceptualizing the person-in-environment perspective. For example, "one health" emanating from human and animal medicine, expands the understanding of the environment by including the HAI and implications for wellbeing, disease transmission, and how factors such as poverty, racism, abuse, and the physical environment contribute to disenfranchised life experiences and ill health (Rock et al. 2009; Schwabe 1984; Zinsstag et al. 2005).

This presentation will consider the relevance of the HAI with social work's person-in-environment perspective and explore the parallel principles with the one health framework. Interdisciplinary applicability of both the "person-in-environment" and "one health" concepts will provide understanding of the dynamic nature of the HAI and consideration for future research, practice, and collaborative responses for human and animal health and wellbeing.

Equine-assisted therapy: research review and state of the profession

Beth Macauley

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The purpose of this presentation is to give a review of the global literature for therapeutic riding, hippotherapy, and equine-facilitated psychotherapy and give a state of the profession address. Topics will include statistical data from NARHA and AHA, Inc. in the US, as well as summaries of the best peer reviewed research studies from across the world and personal commentary from a professor who has been incorporating AAT clinically as well as conducting research in AAT for over 20 years.

The assents of the diverse setting modalities in AAT, and the need for a unifying model

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The aim of AAT, as in psychotherapy, is to enhance quality of life, while identifying new ways for endorsing the client.

The basic client-therapist relationship is similar in some respect to that in psychotherapy; however the addition of animals to the therapeutic setting and process creates a dramatic change.

Our experience shows psychotherapy has a unique significance when animals are involved. Yet, the unique characteristics of their contribution and the optimal setting for this contribution are not always apparent and understood.

The idea for this lecture evolved via the clinical experience of the authors, who practice AAT in four settings, with common as well as different qualities. We believe that in order to deepen the comprehension of the magic lying in AAT, we need to examine and define the container in which the therapeutic work is done, and will offer a therapeutic modal referring to this unique container.

In psychotherapy, the significance of the setting and its components are interpreted according to various theoretical views. In AAT, the number of different settings, reflect the lack of one common theoretical guideline. The current approach, defines the setting according to two essential characteristics: one is derived from the characteristics of the animals used in therapy; the second is derived from the characteristics and needs of the clients (Granger & Kogan, 2000). One of the novelties we offer is an additional attribute, derived from the characteristics of the therapist, among others- his approach toward AAT. This approach highlights one of the central differences existing in the field- the difference between 'Animal Centered Therapy' and 'Animal Assisted Therapy'. While 'Animal Centered Therapy' defines the presence of animals as an integral part of the setting and process; 'Animal Assisted Therapy' allows therapeutic situations without the presence of animals and the setting is not defined by the animals' presence.

This lecture will demonstrate these approaches and provide reference to psychological data and research.

Reference

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An animal assisted therapy (AAT) programme for children with HIV infection.

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Aims

The aims of this programme, developed in collaboration of the above mentioned (authors) and sponsored by Masterfoods, were: 1. to experiment Animal Assisted Therapy (AAT) for children with HIV infection, 2. to evaluate if "taking care of the dog" could help in opening channels of communication about the illness and assist in the elaboration and transformation of anger and depression issues, translating them in activities of nurturance and social openness.

Method

For a period of six months, eleven children from 5 to 14 years of age, divided in two groups: group 1 with knowledge of their diagnosis and group 2 not yet informed of their diagnosis, were involved in bimonthly AAT sessions. The setting was a large adequately predisposed room of the hospital and the actors were the children, 2 Pet Partners® dog-handler teams (different dog for each group), the psychologist, a special needs teacher and the head nurse. All children involved also continued in their therapeutic care with the psychologist of Department of Pediatrics of the hospital.

Results

Encounters with the dog allowed the children to verbalise very intense personal experiences: fear, anger, suffering, death fantasies, need of affection and nurturing. The small group size, with peers of the same health condition, allowed them to experience mirroring and alleviate feelings of loneliness and diversity ("we are all in the same boat," "I feel less alone"). In the sessions with the psychologist of the hospital, significant changes were observed: all the children spontaneously spoke of encounters with the dog, externalising emotions that they had not discussed for a long while. Also their family members were more open in dealing with the hospital medical staff.

Conclusions

Overall, in this experience, the relationship with the dog proved a powerful vehicle and activator of deep set emotions and AAT proved a valuable tool that enhanced the ability and intervention of the health professionals in the difficult task of supporting children with HIV infection.

Visiting dogs and the wellbeing of double diagnosed psychiatric patients

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It is well-known that visiting dogs can have positive effects on the quality of life of vulnerable populations. It is supposed that the animal assisted interventions enhance self-esteem, fulfil emotional needs, the need to nurture, provide tactile stimulation, activate, and are functioning as social catalysts. The theoretical frameworks that are used to explain the effects are social support theories, attachment theories and environmental theories. Doing research in this particular population however meets many methodological problems, due to the diversity of the participants in diagnoses, time of hospitalization and the state of the process of their mental and physical illnesses. Many of them are unable to fill in questionnaires themselves.

In this study we investigate patient-animal interactions in a nursing home for psychiatric patients (N = 40) with somatic disorders; we used qualitative methods with a multi source design. In this severely hospitalized population social skills and verbal capacities were merely lost. Long observations (one hour each) of individuals (N = 4) and group sessions (N = 3 x 12) were carried out, with and without the presence of a visiting dog and a handler as well as during occupational therapy activities. Semi-structured interviews were held with patients (if possible); with nurses and other staff members.

The results show that several aspects within the patient-animal interactions are effective and are in top of the effects of other occupational activities: more spontaneous emotions, communications, physical activities and alertness during the dog visits than during other activities. Other aspects were also influential: the attitude of co residents, staff members and handlers as well as the character of the dog did matter. The experience of 'unconditional acceptance and love' of the animal is a key aspect in the theoretical framework we present to explain the mechanisms of animal assisted interventions.

Can horses help? The effect of Animal Assisted Activity on depression, anxiety and self-esteem, in adults with severe and enduring mental health difficulties.

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Background

The provision of services for individuals with severe and enduring mental health difficulties is among the most clinically complex and financially demanding challenges for service providers. Within the United Kingdom, the National Health Service is under mounting economic pressure to identify short-term, cost-effective, therapeutic interventions.

Anecdotal evidence of the benefits for mental health of human animal interactions is long standing. While the benefits of therapeutic horse riding have been well documented, the effectiveness of ground based activities with horses is less well established. Recent research has provided encouraging results in the use of farm stock in AAA (Berget et al 2008).

This collaborative project between Lincolnshire Partnership NHS Foundation Trust (LPFT) and Lincoln University, sets out to evaluate whether Equine Assisted Activity (EAA) is an effective intervention for improving the psychological well-being of adults with severe and enduring mental health difficulties; in particular on depression, anxiety and self-esteem.

Method

Thirteen adults under the care of LPFT Adult Mental Health Recovery Teams participated in the study. Participants attended ten weekly sessions of EAA, in groups of up to four. The programme developed by the research group, comprised of stable-based, task-focused activities, centred on the relationship with the horse. It was facilitated by a horse professional and a mental health professional, who were accredited with the Equine Assisted Growth and Learning Association. All participants had at least a moderate level of depression (>9 on Beck Depression Inventory (BDI)) and were assessed with clinical measures prior to, immediately post and at 3 month follow-up. Clinical Measures included the BDI, Beck Anxiety Inventory (BAI) and the Rosenberg Self Esteem Measure (SEM)

Results

Pre and immediately post-intervention data identified a significant reduction in levels of anxiety (BAI) and depression (BDI) but no changes were identified in measures of self-esteem (SEM). Qualitative data gathered from a focus group post intervention, identified themes of increased confidence, reduction in anxiety, increased motivation and positive mental shifts. Monitoring of participants is ongoing.

The horse as a transference phenomenon in psychotherapy

Géza Kovács

Zorggroep Ars Curae, Rainbowranch Foundation, Amstelveen, Netherlands

Objective

A substantial group of patients with psychological complaints benefit insufficiently from the existing verbal psychotherapies. The reason may be that the existing treatment methods emphasize more on the cognition than on the experience of patients. Since these patients have impairments that can be linked to pre-verbal developmental stages an experiential method is designed: Equestrian Focal Psychodynamic Psychotherapy (EFPP), in which nature, animals and especially horses as transference phenomena are included. EFPP is based on elements of the psychodynamic and existential psychotherapy. We believe that EFPP lowers the resistance and offers a corrective emotional experience for hard to reach patients. Aim of the current study was to explore possible changes in psychological functioning by offering EFPP, and to explore its beneficial factors.

Method

In a pre-post design we measured the degree of change of psychological dysfunction, depression and quality of life. Additionally we gathered qualitative material through semi-structured interviews aimed at the beneficial factor for the patient.

We followed 2 patient groups:

1. Clinical patients with cluster B or C personality disorder (N=51) who underwent EFPP during their regular group therapy program and compared them with a regular clinical group (N=20). 2. And, a selected vulnerable psychiatric group (N=25), diagnosed with bipolar disorder and dropped out of psychiatric care.

Results

Group 1. showed significant results on all (except som-scale) subscales of SCL90 (indicator of psychological dysfunction), significant results on the subscales I and II of the WHQ (quality of life indicator) and significant results on BDI (depression indicator) ($t=4.71, df=22, p<0.0005$).

The control group showed equal significant changes.

Group 2. showed in particular on the BDI significant changes after EFPP ($t=5.532, df=20, p<0.0005$). The qualitative material as well gave strength to our hypothesis that nature, animals and especially horses lower the resistance and can function as powerful transference objects.

Conclusion

The data from this mixed method showed significant changes and effective advantages by using EFPP with vulnerable group of patients. Further research is needed to explore the role of the animal within this therapy.

Farm animal-assisted intervention: an interview study on key elements for persons with depression

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The prevalence of mental health problems in Norway is high and probably increasing. For one of the main disorders, clinical depression, conventional treatments are not always successful or possible to offer. Therefore, it is important to expand the range of treatments offered, and to develop new supplementary treatments. One such supplement is Green care; a term describing farm-based interventions with farm animals as a central element. In contrast to animal-assisted interventions with companion animals, there are a limited number of studies related to farm animals, and few if any, qualitative studies. The main aim of this study was therefore to obtain the participants' own experience of a farm animal-assisted intervention, and what they perceived as important factors in relation to their mental health status. A semi-structured in-depth interview was carried out with eight adult participants who all had completed a 12-week intervention at a dairy farm. Twice a week in the afternoon they had participated together with the farmer in different ordinary work tasks with the cow herd, like feeding, grooming, cleaning and milking. All participants had a clinical depression, confirmed by a diagnostic interview. The in-depth interviews were analyzed according to a modified version of systematic text condensation, made by K. Malterud. The analyses revealed that major central elements in the intervention were flexible and adjustable demands, an experience of coping, equivalence, appreciation, usefulness, and a calming effect of the animals. A model was constructed, showing the interaction between the different elements at the farm and their potential influence on important features connected to mental health such as stress and activation, coping, and social support. This model provides a possibility to investigate all work-related elements of the farm animal-assisted intervention and its potential positive health effect on the participants.

AAT - Coping with medical procedures

Tal Segal

Ilanot school, Animal - Assisted Therapy, Jerusalem, Israel

Ilanot is a special-needs school in Jerusalem, Israel. The school caters for students with Cerebral Palsy (CP) and other muscular diseases.

Most of our students see doctors frequently, and have to endure various medical procedures. AAT gives us plenty of opportunities to deal with these issues. Many students like to play "doctor". Unlike play therapy, in these actions the "patient" has a pulse, knows his own mind and has his own desires. In addition to being playmates the animals have a meaningful role in the therapeutic environment, due to the fact that they can really fall ill.

Each time an animal is in need of medical care, or even surgery, it enables us to deal with the immense emotional reactions, stemming from the students personal experiences.

By projecting on the animals their own emotions they are able to process the wide range of emotions that may rise in these situations, in a protective and non threatening setting.

In addition to the emotional processing, taking care of the animals enables these children to reverse the role of caretaker and patient, they are now the strong, and the abled, and someone is dependent on them.

In this presentation I would like to share with you the therapeutic process that a group of 5 students experienced while preparing a rabbit for surgery. At the beginning the students asked questions about the necessity of the surgery, the benefits and the risks, and afterwards continued to prepare the rabbit for the surgery.

The preparations were made mainly for her emotional needs. We started by finding ways to comfort her, and reduce her stress before the surgery, and continued by voicing "her" wishes and expectations during and after the surgery itself. These were direct projections of there own experiences and feelings.

Companion animals and elder adult welfare: new approaches to assessment

Frank Ascione

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The roles of pets in the lives of elder adults (e.g., alleviating loneliness, promoting psychological health) are receiving greater research attention. However, we are not aware of any empirical research on animal welfare and abuse issues related to the needs of maltreated elder adults. With support from the Kenneth A. Scott Charitable Trust, we developed assessment protocols that shed light on animal welfare and abuse factors related to the challenges to serving the needs of elder adults. Our project activities were conducted with the collaboration and cooperation of the Utah Division of Aging and Adult Services and Utah Adult Protective Services. We also wanted to find out if other state agencies were asking questions about pets at any point in their interactions with or about older adults. We surveyed 50 states in the U.S. and asked representatives about any screening for animal-welfare related issues they may address in connection with Adult Protective Services or any other elder abuse screening. 41 states (82%) responded to this brief survey and we found that fewer than 30% of agencies include animal welfare questions in their investigative protocols. Our assessment protocols, Elder Abuse/Neglect and Animal Welfare/Maltreatment, include general questions about pet ownership, elder adults' characterizations of their relationships with pets, and any concerns that elder adults' might have about pet welfare. In addition, concerns elder adults might have about pet management, care, and welfare are explored. Versions of the assessment protocols have been shared with a variety of qualified experts in the field who have generously provided their professional evaluations and helped us refine the assessment questions. The full protocols and an accompanying PowerPoint presentation are available at: <http://www.usu.edu/psychology/ascione/index.php> We also report on evaluations of the significance of these issues provided by Adult Protective Services professionals at a recent (2009) national U. S. conference.

Animal welfare education: better understanding by more information and respect

Erik Schmid

County Government Vorarlberg, Veterinary, Bregenz, Austria

Eurobarometer reports confirm urgent need for better information of consumers about animal welfare and husbandry. The Animal Welfare Action Plan of the European Commission includes also labelling products respecting animal welfare as an important aspect of quality assessment. There is a massive lack of knowledge about animal husbandry within the majority of consumers. The experience of people with farm animals is missing completely, especially in urban regions. Insufficient understanding results in a critical opinion about the current animal welfare situation of farm animals. The perception of the welfare conditions of their animals is significant better within the farmers.

Self evaluation on farm level

The text of the Animal Welfare Act is difficult to understand, not only for farmers. Therefore the Austrian Ministry of Health decided to use the system of self evaluation on farm level. The complex legal requirements were translated into a simple check-list for cattle, small ruminants, pigs and poultry. The corresponding manuals include detailed definitions and interpretations binding for advisory and authority bodies. The system is mandatory for all members of the "Animal Health Service". The self evaluation by the farmer is checked for plausibility by the veterinarian and considered within the risk based control plan.

Animal welfare goes to school

Transfer of knowledge about animal husbandry from the scientific level to consumers has to start at school level. A non profit association "Animal Welfare Education" was founded. Training courses for teachers and booklets about pet, farm and wildlife animals give solid information for teaching animal welfare. The County of Vorarlberg took one step further initiating a project "AnimalExperience" coordinating the "Animal Welfare Education" with the "Farm Vist" program. As only experience makes people change their habits, every pupil should have the possibility to visit a farm twice in his school time.

A design proposal of kit for education of animal protection in Japanese schools

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The present study is a design proposal of education program about animal protection. The proposal is developed for Japanese teachers. Although veterinary experts try to assist the education, the animal protection as Humane Education has not taken root in Japan, yet. One of the reasons is the lack of specialized knowledge in teachers who want to introduce the education program in elementary schools and junior high schools; they want to deal with the sanctity of life using animals, but their superficial knowledge about HAB constricts the progress of lessons. Our proposal is not only a mere translation from Western education programs, but also is a reorganized program in keeping with the reality of Japanese schools. It is a kit consisting of manual, printed matters like posters and cards, and list of support organizations. Teachers can use the kit without any help from specialists and give tuition in the animal protection by themselves. They can also ask knowledge to the specialists in the list for further lessons. The kit easily encourages teachers to teach the animal protection in the class. The lessons feature visual aids.

Now, symbiotic environment is one of hot topics in design research. However, researchers in this domain have not focused on the harmonious coexistence of animals and humans. The present study is a bridge between HAB and design researches. Usually, design researchers use approaches of problem solving, because they have clear goal to reach, for example to know design requirements of cell-phone for elderly people. The proposal of education kit for animal protection is a research of communication design. Teachers indirectly communicate to specialists of HAB through the kit and directly communicate to pupils. Our proposal makes clear the problem in the communication to educate the animal protection in Japan and sets up a solution.

"Manga" as a medium for humane education

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Manga, literally translated as comic books, is a unique Japanese cultural phenomenon. Though comics may be seen solely as entertainment, it has frequently been used to educate children in various subjects. In Japan historical events, scientific phenomenon, social institutions, and numerous other subjects have been written up in the form of manga textbooks. Different from the world of comics for entertainment, these "educational texts" are based on facts and are, in other words, "picture textbooks" with an extremely high rate of acceptance amongst Japanese children. In the spring of 2009 the Japan Animal Welfare Society has for the first time utilized this particular medium to publish a textbook on humane education for young children. The book is divided into sections about dog care, cat care, small animals, exotic pets, and wild animals. The material was originally piloted as a one page "JAWS Junior Corner" in the official newsletter of the organization from 1997. Due to favorable feedback from the body of subscribers, the individual pages were compiled and re-edited into a full scale textbook for humane education of young children. On every page there appears a short manga story about the thoughts of an animal placed in a certain situation, and the facing page contains written information for parents and educators, as well as, older children, on why the theme was chosen. The book has been distributed to all prefectural public animal control centers, veterinary associations, and PTA federations, as well as to 53 private elementary schools in the Tokyo Metropolitan area. JAWS is currently awaiting feedback from these entities. An English translation is being prepared to introduce this new medium to a wider audience.

Animal Insurance: the Swedish example

Pekka Olson, Brenda Bonnett

Agria, Agria International, Stockholm, Sweden

Agria Sweden has provided insurance for animals since 1890. In Sweden, Agria insures close to 300,000 dogs, almost 250,000 cats and over 100,000 horses per year. Agria International operates in Norway, Finland, Åland and the United Kingdom. The company and its partners have a level of understanding for and experience with insurance for farm animals, horses and dogs that is unique.

Of the over 700,000 dogs in Sweden, at least 78% are insured and approximately 27% of the 1.2 million cats. What is special about human-animal interactions in Sweden that has led to this level of insurance penetration? What is special about Agria that it maintains the highest market share? What are the benefits and challenges to the insurer: veterinary profession: client triangle that forms the basis of Agria's close, ongoing relationship with these stakeholders?

We will describe the history, character, goals and structure of Agria, both from the business aspect and in relationship to issues of animals and society. Data on trends in animal ownership/insurance, claims for disease and death and veterinary costs will highlight this discussion.

Integral to the success of Agria has been a close and ongoing relationship with animal-owner organizations (e.g. Swedish Kennel Club, equestrian groups) and with academic veterinary institutes, including extensive research funding. In the presentation we will highlight how a broad focus on maintaining and improving the health of individuals and animal populations is basic to the goals of Agria.

In Dr. Bonnett's plenary session research findings from Agria data will have been presented. This presentation on the background to the extensive animal insurance history in Sweden, which is the underpinning of the data, will be of interest to those seeking more information on the Swedish situation and provide an example of the potential for successful animal-industry partnerships internationally.

Companion animals in obituaries: a trans-national study

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Introduction

Families report similar experiences of loss following the death of a companion animal (CA) and compare them to the loss of a human relative. Questions remain whether a CA becomes an extension of the companion person and/or the other surviving family members. This paper describes a bi-national, exploratory, pilot content analysis of CA-related content in obituaries written by survivors or authored by the deceased.

Methods

All obituaries (N= 14,720) from 3 major city newspapers (The Washington Post (WP; n=8634), Richmond Dispatch (RD; n=5,402), and TagesAnzeiger (Daily Newspaper of Zurich) (Z; n=684) between 10/08 and 4/09 were reviewed for CA related content (i.e., mentioned a CA survivor and/or suggested donation to an animal related agency in lieu of flowers). Demographic data were collected when available.

Results

Of the 14,720 obituaries, 179 (1.22%) listed a pet survivor [Criteria #1]; 131 (0.89%) donated to pet-related agency (PRA)[Criteria #2]; and 35 (0.24%) met both criteria. The WP and RD included equal numbers of males and females meeting #1 or #2. The only person in Zurich paper listing #1 and #2 whose gender could be determined was male. Pets listed as survivors were primarily dogs in the US (WP = 72.7%; RD = 39.02%) but cats in Switzerland (Z=100%). Pet survivors were listed by name in 76.36% obituaries in WP; 52.84% in the RD and 100% in the Zurich paper. Donations to PRA's occurred in all three papers (WP = 0.93%; RD = 0.67%; and 15 % Zurich).

Conclusions

CA's are beloved survivors as seen by human family members and/or listed as such by the deceased. Including the pet in the obituary represents a means of extending the fabric of the family system and may represent a symbolic manifestation that a part of the deceased remains with the family.

The report of activity: Pet Lovers Meeting - The first self help group for pet loss in Japan

Hazuki Kajiwara

Pet Lovers Meeting, Director, Tokyo, Japan

Pet Lovers Meeting (PLM) that I manage is the first self help group for "pet loss" in Japan. It was established in Tokyo in 2000. After that, how PLM has been changed and developed for ten years? I report on the process of the development of my group, by the technique in the auto-ethnography.

The main activity of PLM

1. Meeting

The owners who have lost the companion animal gather and talk about grief.

2. Pet loss hotline

The volunteers listen grief for bereavement on the phone.

3. Seminar and lecture

Those seminar and lecture are held so that veterinary students (and veterinary technician students) may learn feelings of the client.

The chronicle of PLM

2000-2002 Establishing foundation

2003-2004 Identifying myself as a supporter

2005-2007 Beginning social activities

2008-2010 Accepting constructivism

The social circumstances about the pet loss have been changing little by little for ten years in Japan. However, the pet loss is still "Disenfranchised Grief". For instance, When I speak to someone that I'm managing the self help group for pet loss, I am laughed at sometimes or, I am ridiculed by saying that "You are a leisured person".

In such the social circumstances, what meaning did we find to the volunteer work. What difficulty did we feel while continuing the activity of PLM? And, how was it got over?

This report would be useful as a precedent to the people in Asian countries. Because in these countries, the pet loss will become a issue in the society in the future.

In addition, this report will suggest what support is necessary for the person who manages a self help group, to the psychologist and the sociologist.

A dog-assisted training program to reduce symptoms of ADHD in children

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Dogs can have a calming, relaxing, and also motivating effect on humans, particularly children. This phenomenon is utilized in various interventions for persons with mental disorders, diseases, impairments, or lack in social skills. Based on an already established and proven training program (Ettrich, 1998) for children with ADHD, a dog-assisted program was developed. It includes the original exercises in the presence or with the involvement of the dog, but with several additional breaks for petting and playing. Children participate in small groups (N=3-4) twice a week over the course of 5 weeks.

Data of 14 children diagnosed with ADHD/ADD (6 female, 8 male; age 6-11; Mean=8; no medication=10) were obtained before and after the training program: Self-reports on school-related self-worth and school-anxiety answered by the children and a rating of the child's impulsivity, lack of attention, and hyperactivity from the parents (CBCL). While parents reported some improvement on all scales, data showed a statistically relevant trend only for impulsivity over the course of the training (repeated measures ANOVA: $F=3.61$, $p=.084$). Apparent anxiety in school decreased ($F=3.57$; $p=.092$), and reached statistical significance for the boys ($F=7.36$, $p=.042$). Also test anxiety decreased significantly in the boys ($F=6.20$; $p=.055$), as well as the dislike of school ($F=7.72$; $p=.039$). Parents reported that their children liked the training and that they would recommend it to other parents. The data suggest that the dog-assisted program has a positive influence on school-anxiety and impulsivity. This is particularly relevant, since both factors interfere with successful learning. Statistically non-significant results indicate a trend for improvement of further symptoms and warrant testing of the program among a larger sample.

The motivational effects of a dog are important with regard to the compliance with 10 sessions of the intervention program, which otherwise frequently poses a problem among children with ADHD/ADD. Supported by a grant of the Industrieverband Heimtiernahrung (IVE) e.V.

Effects of an animal-assisted intervention for children with autism spectrum disorder and their peers in a classroom setting

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Introduction

The classroom can be a stressful and challenging environment for children with autism spectrum disorder (ASD) due to the fact that a major feature of the disorder is impairment in social interactions. Theorists and clinical practitioners have proposed that one viable addition to current classroom practices may be the implementation of an animal-assisted intervention (AAI). The aim of this study was to assess the impact of an AAI with guinea-pigs for children with ASD and their typically developing peers in a classroom setting. It was hypothesized that the AAI would increase positive social behaviors and decrease problem behaviors in children with ASD and their typically developing peers by potentially providing a unique outlet for children with ASD to socially integrate more fully with their classmates.

Methods

Sixty participants (20 children with ASD and 40 typically developing children) aged 5-12 received the 8-week AAI. In each classroom, one child with ASD and two randomly assigned typically developing peers formed a participant group. During the intervention, two guinea-pigs were housed in the classroom and each participant group received two 30-minute sessions per week, which focused on learning to care for, interact with, and understand the physical and social needs and communication of the guinea-pigs. Outcome measures included a questionnaire administered both before and after the intervention to parents and teachers, including the Pervasive Developmental Disorder Behavior Inventory and the Social Skills Rating System.

Results

Results indicate that this AAI in the classroom significantly increased positive social behaviors and tended to decrease problem behaviors in children with ASD. Similar effects were seen to a lesser degree in their age-matched typically developing peers.

Conclusions

These preliminary results suggest this AAI may provide a relatively simple and cost-effective means of helping educators and families to improve the social functioning of children with ASD.

AAT in the treatment of pediatric migraine - results of a research program

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Operating team: Neuropsychiatrist, Psychologist, Pet Partners, educationist It's tested that at the begin of the paediatric migraine there is a quantitative of anxiety mounted up in that child who meet even the simple things as they was big problems; so these children are more reactive to the stress and seem to tolerate frustrations less than others. Experience has shown that the relationship and the contact with Pets produce an improvement of the mood, the reduction of anxiety and a reduction of the reactions to stress. In AAT programs, the animal involved with its handler, is the transitional object, by which the child can express his needs, and use different ways of communication. Through playing games or grooming exercises it's showed to the children the phases of taking care of the dogs. This is very important to place responsibilities on children end because in this way they have an image of themselves as skilful persons. Purposes: reduction of migraine crisis intensity, frequency and duration; Decrease of anxiety; Decrease of depression; Increase of socialization aptitudes; Increase of self-respect. Target: 35 Children and teen-agers from 8 to 16 years old, suffering from primitive migraine at the "Salesi" Pediatric Hospital High Specialism Medical Aid, Ancona, Italy. Working Period: 35 children involved in the AAT Program during 18 meeting with pets, handlers and the psychologist, for 2 hours one time a week. Working definition: 1. Familiarity and knowledge about Pets and self- Step 2. Contact with the dogs. 3. Learning a kind way to lead dogs. 4. Creative Activities. 5. Group discussion. 6. Final Evaluation. The Psychologist has done the following Tests: projective Tests (Family Drawing and Dussables), C.D.I. (Children's Depression Inventory) and FAB-C (Fillings Attitude Behaviours Test For Children); done before and after the AAT Program. About the medical sight (crisis frequency and duration) a headache-diary has been used, written by the children and supervised by the neuropsychiatrist. RESULTS: reduction of the migraine crisis in all the children involved and total healing in the 68% of the children involved.

The meaning of a guide dog for children with a disorder in the autistic spectrum: a pilot study

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Researchers found that companion animals have influence on the emotional and cognitive development of children; that children are more relaxed in the presence of a pet and that pets provide social support. A new animal assisted intervention is a program with guide dogs for autistic children. Following programs in Canada and Ireland, a pilot program was carried out and studied in the Netherlands. In this pilot study we hypothesised that specially trained guide dogs for the autistic children would enhance the quality of life of the child and the family and would expand their mobility.

Eleven children were followed in this multi-method, multi source case study. The age of the children ranged from 4 -7, (M = 5); 3 girls and 8 boys were participating. The quality of life of the child was described in terms of safe behaviour on the street; 'bolting behaviour'; social behaviour, daily life activities and mobility. The quality of life of the family was described in terms of the functioning of the family members within the family context, mobility and social life activities.

We used the application form, the medical records, the first diary and first interview to measure the starting point. The diaries were mostly filled in by the mothers (during six months). At the end of the measurement period a last interview with the parent(s) was held.

The analysis of the diaries and the interviews show that for 8 of the 11 children (2 girls and 6 boys) and their family members an enhancement of mobility and quality of life is reported since the introduction of the dog in the family. Safety and mobility increased, problematic behaviour of the child decreased, social life became less stressful, family life 'normalized'. Remarkable cognitive, emotional and social progresses of the children were reported. Three combinations 'dog-child' were not succesfull and had to be broken off.



IAHAIO
STOCKHOLM 2010

Oral Sessions

Saturday July 3, 2010

Linking animal abuse and interpersonal violence: dispelling myths and acknowledging research outcomes

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Camilla Pagani, Franco Robustelli

Consiglio Nazionale delle Ricerche, Istituto di Scienze e Tecnologie della Cognizione, Rome, Italy

Since the 2007 IAHAIO meeting was held, research on animal abuse and its relation to interpersonal violence has continued at a steady pace. There are some, however, who have questioned the nature and validity of this relation. This presentation will examine the myths surrounding this research topic and will inform attendees of emerging research confirming this relation. Factors potentially related to the development of such myths will be explored. Examples of recently published empirical studies will be used to illustrate the authors' arguments. We highlight recent developments and advances in research issues on animal abuse from 2007 to the present. We point the readers to informative reviews of research, including recently available books, and focus on empirical analyses and programmatic efforts addressing animal abuse. This paper addresses the challenges facing researchers in defining and assessing animal abuse especially within cross-cultural studies, describes a state-of-the-art assessment of animal abuse that will be valuable for both researchers and practitioners, outlines the relation between animal abuse and mental health in young people, explores the extensive research on animal abuse and domestic or family violence, and discusses the implication of these empirical findings for programs designed to enhance human and animal welfare. Special attention will be given to the need to incorporate information on animal abuse in the training of human health professionals who deal with child maltreatment, intimate partner violence, and the abuse and neglect of elder adults. All of us in the field of human-animal interaction are, at times, called upon to make statements or observations about the relation between the abuse of animals and violence between people. It is essential that our responses accurately reflect evidence-based research and that we clearly indicate the limits of our current knowledge.

New illustration about Animal Hoarding

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In previous studies, some classification had tried to make with Animal Hoarder. For example, Patronek et.al(2006) had propounded 3 classification ,that is "Overwhelmed caregiver" "Rescuer hoarder" "Exploiter hoarder". In addition, on recent years, it is possible involvement of Obsessive-Compulsive Disorder (OCD) with these hoarder cases.

However, from the clinical psychiatric view point, OCD patients have to feel the objectivity with their thinking or action. That is to say, OCD patients have the feeling that their way of thinking is "nonsense". This OCD's way of thinking does not match to the animal hoarding cases. Many animal hoarders do not feel their act as nonsense. In fact, they do not care about the dead bodies in their home or yard. We can not explain many animal hoarding phenomena as OCD's category. So, we try to advocate the new illustration about animal hoarding. That is the possible that "Asperger spectrum (Asperger's syndrome in adulthood) can relate with animal hoarding case".

Currently, in the psychiatric field, "the Asperger spectrum" 's idea is becoming mainstream to explain with wide-ranging mental disorders. Many researchers had reported the evidence that "Autism" "Asperger syndrome" "(some type of) Schizophrenia" "Schizoid Personality Disorder" belong to the same category, that is "Asperger spectrum".

From this new classification, the people who have mild Asperger nature and no mental retardation, and if the supportive people was gone, or if he/she went into socially isolated, the "Asperger's" symptom" may come out. Viewed from the opposite side, the Asperger's symptom, for example "isolation" "obsessiveness" "hoarding" "odd notion" , can explain with this animal hoarding phenomena.

If Asperger spectrum is related with the core group of animal hoarder, we can apply the knowledge or therapy about this spectrum into each animal hoarder cases.

In this presentation, we will explain about this idea with using some real animal hoarding cases.

Beauty lies in the eyes of the beholder - about extreme dog breeding

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Johan Beck-Friis

The Swedish Veterinary Association, Animal Welfare, Stockholm, Sweden

Dogs have been bred from the beginning of mankind for function and probably also for company to some extent.

Today a vast group of dogs are bred only for competition and showing. Most of them are bred for beauty or looks. And it is the judge or the breeder who decides what is beautiful.

In Sweden there are more than 300 breeds registered with the Swedish Kennel Club and this number rises each year as new breeds are introduced.

Many breeds do not have much in common with their ancestor, the wolf. And many purebred dogs today are very alienated with the individual that was model for their breed-description. Today brachycephalic (snub nosed) dogs often have problems with breathing because of the short nose but also because of inside malformations like severe underdeveloped trachea (windpipe). Some breeds have difficulties delivering their puppies - the head of the puppy is big in combination with a too narrow pelvis in the bitch. Without Caesarian section both bitch and puppies die. Other breed-related problems are too much skin - in the shar pei for example, you often have to temporarily suture the eye lids when the puppies are about two weeks, otherwise the dog may develop corneal ulcers, which are extremely painful. Some people say that breeding dogs is not only genetics; it is also a form of art. And artists often want to push the boundaries of their art, to stretch towards the extreme.

The intention has never been to harm the dogs, but today dogs are suffering because the breeding has become too extreme.

To turn this development, Swedish veterinarians and the Swedish Kennel Club are now cooperating to improve breeding. This is an important issue of animal welfare.

Socialization practices of small-scale registered dog breeders compared with non-registered "backyard" breeders

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Objective

Appropriate early socialization experiences may result in dogs that are less prone to develop behavioral problems leading to their eventual relinquishment and euthanasia. There are currently no studies comparing the early socialization experiences of puppies from registered and non-registered breeders. The aim of this study was to compare early socialization practices between litters bred by these types of breeders.

Methods

A retrospective cohort study was conducted to compare socialization practices between 40 randomly selected litters from breeders registered with the Canine Control Council and 40 litters from non-registered breeders randomly selected from those advertising puppies for sale in a local paper. Information was obtained through a questionnaire administered over the phone.

Proportions of litters that were conceived intentionally and locations in which the litter spent most of its time were compared between litters of registered and non-registered breeders using Fisher's exact tests. For all other variables, distributions were compared between litters of registered and non-registered breeders using Mann-Whitney tests with the improved normal approximation procedure of Hodges et al.

Results

Registered breeders generally had more breeding bitches and had bred more litters than non-registered breeders. Litters bred by registered breeders were more likely to have been socialized with adult dogs, people of different appearances and varied environmental stimuli when compared with litters bred by non-registered breeders. A higher proportion of litters bred by registered breeders spent the majority of their time in the home, when compared to litters from non-registered breeders. Litters from registered breeders were also much less likely to have been unplanned.

Conclusions

Litters from registered breeders receive better socialization compared to litters from non-registered breeders. Additional research needs to be conducted to determine whether puppies from non-registered breeders are at increased risk of exhibiting behavioral problems and are more likely to be relinquished to animal shelters or euthanized, relative to puppies from registered breeders.

Factors that affect the success of cat adoption from Australian animal welfare shelters

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This 2008 study surveyed up 212 people who adopted a cat during 2005 and probed factors that influenced the adoption decision, ownership practices, problems experienced and factors related to adoptive failure. People who adopted a cat tended to have previously owned one, with the majority of adoptions motivated by females. Younger cats were preferred, with nearly 80% of the cats aged less than one year of age at the time of adoption. The age, size and appearance of the cat were significantly less important to women than men when deciding which cat to adopt. Whilst 17% of the sample had made an impulsive decision to adopt a cat, this did not affect the retention rate of the cats adversely. Notably, people who adopted older cats were less satisfied with the adoption. Overall, the success rate of adoptions was high, with only 12% of the cats not retained in the adoptive household at the time of survey. The majority of these animals had died, been returned to a shelter or been rehomed. Reasons for failure were primarily owner-centric, although certain feline behaviour was less well tolerated. Notably, some cats were returned because of the regulatory changes requiring 24 hour confinement, suggesting that shelter and pound statistics should be closely monitored after such changes, to ensure that they do not produce any unforeseen consequences. People who owned other cats experienced a greater number of problems post-adoption. The number of people renting accommodation without a 'pets allowed' clause in their rental contract is a cause for concern; this may result in relinquishment if a landlord objects to their cat's presence. Information from this study may enable shelters to improve the adoption process, particularly for older cats.

Is the health of dairy cows associated with the health of their caretakers?

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During the last decades, Swedish dairy farming has undergone considerable structural changes and technical development. Animal herds are decreasing in number and increasing in size, which influences the animals and their caretakers in several ways. The main purpose of the study was to investigate possible associations between the health of dairy cows and the health of their caretakers. The hypothesis was that caretakers working with healthy dairy herds have a health superior to those working with less healthy dairy herds.

A sample of 61 caretakers (owners/managers and employees) in 61 dairy herds with approx. 6,300 dairy cows participated. Questionnaires were used to assess perceived physical (PHY) and psychosocial (PSY) work-environment risks and symptoms among the caretakers, and used as continuous outcome traits with higher values assigned to poorer health. Official records of veterinary treatments were used to assess total herd disease incidence rates (IRT) and clinical mastitis (IRM). Partial Spearman rank correlation was applied to analyse the associations of IRT and ITM with PHY and PSY.

Physical health disturbances were frequently reported among the caretakers. Though, the caretakers seemed to be contented with their psychosocial work environment and had very few mental health problems. Results from the partial correlation analysis showed that owners/managers PHY was significantly negatively correlated with total disease (IRT) (Spearman $r = -0.36$; $P = 0.029$) and with clinical mastitis (IRM) ($r = -0.41$; $P = 0.012$) in the cows. No such associations were seen in employed workers, nor with PSY. However, correlations of both PHY and PSY with mastitis were moderately negative in owners/managers while moderately positive in employed workers, although non-significant.

Our study indicates that good animal health is associated with poor caretaker health. A possible explanation is that healthy cows require caretaker devotion and diligence, which may increase work load.

Pet's presence and owner's blood pressures during the daily lives of pet owners with pre-to mild hypertension

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Background

As the population ages the number of older adults living with hypertension (HTN) is rising dramatically. Uncontrolled HTN increases cardiovascular and renal mortality. Ambulatory (A) blood pressure (BP) is a better predictor of HTN-related morbidity and mortality than office BP. Lower BP is the most important therapeutic goal in treating HTN. Any reduction in BP has significant benefits for older adults.

Purpose

To evaluate the impact of the presence of their pet dogs and cats on ABP during the daily lives of independently community living older adult pet owners with pre- to mild HTN.

Methods

A longitudinal observational study of ABP of 32 pet owners (24 dog;11 cat; 29 women) aged 50-83 years with BP 120-150/ 80-100 mmHg or < 150/100 with anti-hypertensive medication. Owner's ABPs were recorded every 20 minutes for 1 day during waking hours at study entry, 1 month, and 3 months. Activity monitors and diaries were used to obtain information about activity, mood, and whether the pet was present with the owner at each assessment. Generalized estimating equation analyses for hierarchical data (unstructured correlations) were performed for systolic and diastolic BP.

Results

Average ABPs were significantly (systolic BP: dog $p = .008$, cat $p > .05$; diastolic BP: dog $p < .001$, cat $p < .001$) lower (SBP/DBP mmHg: dog 3.9/2.2; cat -2.2/2.9) when pets were present after controlling for participant's mood and activity intensity, which were also significant predictors of BP.

Conclusion

The presence of a dog is associated with lower systolic and diastolic BP and of a cat is associated with lower diastolic BP during their owners' normal daily lives. This finding suggests that pets, especially dogs, may be effective as an adjunctive intervention to slow the development or progression of HTN in older adults. Comparison of ABPs of pet owners with non-owners during their daily lives is warranted and underway.

Pets and human health: The biobehavioral and psychobiologic interface

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Stress can affect human health in a variety of ways and has a direct influence on blood pressure and pulse. Stress also influences human immune system function, human hormones, and immunoglobulin levels. As a nurse scientist, it is necessary to investigate interventions that decrease stress and increase human health outcomes. Therefore, the purpose of this quasi-experimental study was to examine the relationships among stress (as measured by stress indicators: salivary cortisol, blood pressure and pulse measurements) and health (as measured by a health indicator: salivary immunoglobulin A IgA) before and after a 20 minute exposure to a certified animal assisted therapy canine. The rights of human subjects were protected by obtaining approval from the Institutional Review Board (IRB) of Kean University prior to data collection. The participants who agreed to participate were evenly divided into pet owner and non-pet owner groups and exposed to an experimental condition (canine exposure) and a control condition (canine video); alternating condition exposures over a two-week period. During the first week pet owners were exposed to the experimental condition and non-pet owners were exposed to the control condition. During the second week pet owners were exposed to the control condition and non-pet owners were exposed to the experimental condition. Salivary cortisol and IgA levels were measured by using a commercially-available saliva collection device and enzyme immunoassay (EIA) technique. The statistically significant results of this experiment provide a baseline for future study on using in vivo (blood pressure and pulse measurements) and in vitro measures (biomarkers for salivary cortisol and IgA) to measure the relationships among stress, pets as a coping resource, and human health outcomes.

Is pet ownership associated with childhood obesity?

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It is hypothesised that pet ownership, in particular dogs, during childhood, may protect against obesity. This could be due to encouragement of an active lifestyle or emotional benefits.

The Avon Longitudinal Study of Parents and Children (ALSPAC) recruited 14,541 pregnant women resident in Avon, UK, during 1991-1992, and followed the health and development of their children. Pet ownership data were collected up to 10 years of age. Body Mass Index (BMI) from 7yrs was calculated from clinic-measured weight and height and standardised in reference to 1990 UK data.

On univariable analysis, dog ownership at 7yrs was associated with an increased likelihood of being obese (OR=1.33, 95%CI 1.08-1.63, P=0.01). Children who had 'sometimes owned a dog' were more likely to be obese than both children who 'never owned a dog' (OR=0.59, 95%CI 0.47-0.75, P<0.001) and children who 'always owned a dog' (OR=0.68, 95%CI 0.49-0.95, P=0.02). However, after controlling for gender, maternal education and social class, plus other previously identified risk factors for obesity in this cohort (birth weight, maternal smoking during gestation, parental obesity, TV watching, and sleep duration), obesity was no longer associated with dog ownership at 7 years (OR=1.18, 95%CI=0.88-1.59, P=0.27) or with those who 'sometimes owned a dog' ('Never' OR=0.80, 95%CI=0.56-1.14, P=0.21; 'Always' OR=0.82, 95%CI=0.52-1.31, P=0.41).

This study demonstrates the importance of controlling for other behavioural and environmental factors, particularly as socioeconomic status affects both pet ownership and health outcomes. It also reflects that the pet owning population is unlikely to be a homogenous group. There was no evidence for a protective effect of dog ownership against childhood obesity; if anything, families with obese children may be acquiring dogs. This study confirms that obese and overweight children own dogs, but more investigation is required to determine whether this impacts their physical activity; do they walk with their dog?

The dogs behaviour in AAT with stroke patients - a pilot project at Sunnaas university hospital

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This project aimed at investigating the dogs behaviour in AAT with stroke patients. An important aspect of AAT is finding the right animal. There is a huge variety of behaviour in different breeds and of course also within breeds. For the intervention we chose to use a golden retriever, a breed which has been bred to become a sociable, athletic, and intelligent animal. Golden retrievers are very outgoing dogs; they enjoy people and all their attention. The dog used in this project was a 2.5 year old female, bred to be a guide dog.

This was a randomized controlled pilot study involving 21 patients admitted to Sunnaas University Hospital outside Oslo. The intervention involved interaction with the dog for 15-20 minutes, three times per week during 6 weeks. Video records were taken once a week, and the behaviour of the patient and the dog, as well as their interaction, were analysed with The Observer programme. The ethogram had a number of categories, but for statistical analyses these were lumped into "spontaneous behaviour" and "behaviour instructed by the therapist". We also ranged the patient's degree of interaction with the dog based on type of interaction, and for physical contact with the dog we recorded which body part was touched.

The dog seemed to respond better to shorter, frequent contact than long-lasting contact. For patients who scored above mean in number of contacts initiated with the dog, the dog in 60 % of the cases also would seek more contact towards the patient, and less signs of trying to go away. However, for patients who spent more than average total time interacting with the dog, the dog more often showed signs of wanting to leave the patient (66 %). The dog's behaviour towards the patients changed during the intervention period. At the beginning of the intervention the dog obviously was curious about the new person, and was eager to make contact. This however changed in the middle of the intervention for each patient, and we then observed that the dog showed more signs of wanting to leave the patient. These results indicate that, for the dog, there is an optimal frequency of interaction and total time with the patient, before the dog loses interest in the person.

A survey about Human-Animal-Interaction: A possible effect of pet as sleep-related environment

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INTRODUCTION:

Recently, companion animal is much more likely to be deemed as a family member in Japan. They are dressed, they are attended to family photos, and they are allowed to go into bedrooms.

John Shepard, M.D., medical director of the Mayo Clinic Sleep Disorders Center, found that many people with sleep problems were sharing their bedrooms with their cats and dogs (Science Daily, 2002). We pay attention to sleep as a factor of Human-Animal-Interaction. Our goal is articulating the link between sleep-related environment (e.g. Where is companion animals bed?) and people's daytime sleepiness.

METHODS:

We conducted a pilot study (StudyA) in 2007, and a survey (StudyB) by questionnaire including Japanese Epworth Sleeping Scale (JESS) in 2009. Respondents of StudyA are consisted of 69 pet-owners (average age 20.25 years old) and 158 non-owners (19.66), that of StudyB are 98 pet-owners (19.19) and 226 non-owners (19.02). In this research, companion animals are confined to dogs or cats. A scale about the quality of sleep on StudyA is our original, meanwhile, on StudyB is JESS. JESS is a scale of people's daytime sleepiness. On both scales, it means good sleep that total point is more smaller number (StudyA Fmin 0 ~ max 12, StudyB Fmin 0 ~ max 24).

RESULTS:

Dogs or Cats Dog-owners can get better sleep than non-owners, and non-owners get better than cat-owners (StudyA FDOG 5.88 / NON 5.92 / CAT 6.1, StudyB FDOG 10.55 / NON 10.81 / CAT 11.61).

Where is animals bed In case of someone who share bedroom with their dogs or cats, many people can get better sleep with training and / or using cage not to share their bed (StudyA FBED 6.24, NOT 6.14, StudyB FBED 11.04, NOT 10.33). However, approximately, dog and cat-owners who don't share their bedrooms with them can get better sleep than who share (StudyA FSHARE 6.21 / NOT 5.42, StudyB FSHARE 10.86 / NOT 10.55).

DISCUSSION:

Attitudes of animals are varied by differences on country and / or person. Therefore, it is possible that the differences have an effect on quality of our sleep. In addition, this is our assumption, we may have good sleep as one of reason for pet ownerships.

Effects of animal assisted activity on 7- 11 year old girls in institutional care in Greece

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The study took place in a Greece institution for the care of children. The hypothesis predicted that interaction with a dog in an AAA programme would lead to change in psychological status in girls aged between 7-11 years.

The mixed (2 x 3) design used three repeated measures (baseline; immediately following the AAA programme; and one month after programme completion). The independent variable was the girls' age; the dependent variable was their psychological status at each point of assessment. Information was also collected on prior experience with and attitude to dogs and some demographic data. The participants were girls aged 7-9 years (n=8) and girls aged 10-11 years (n=9). Each group attended 10 AAA sessions with a six month old mix-breed bitch and the male researcher. The girls' psychological status was measured by standardised questionnaires designed for their age groups. These measured overall health and subscales relating to self-perception of school and physical ability, social relationships, physical appearance, behaviour and self-esteem (Makri-Botsari, 2001a, 2001b).

To test for any changes across time, Friedman tests were conducted for each group for each subscale and for overall psychological status. The results indicated increases in both overall psychological status and for each subscale. This increase was apparent immediately after the AAT programme, and though the scores declined slightly after one month they remained significantly above the baseline level ($p < 0.01$) for overall psychological status and for each subscale, except for 'sports ability' in the older group ($p = 0.04$). The data did not suggest any relationship between these results and prior experience of or attitude towards dogs.

Though this was a small study with no control comparison, it does indicate that AAA provision for pre-adolescents in institutionalised care may have effects that are reasonably long lasting. The study indicates this area warrants further exploration.

Key words: animal assisted activity, pre-adolescent, children, institution, girl, psychological benefits

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MAKRI-BOTASRI, E (2001a) How Do I Perceive Myself, vol 1 Athens: Ellinika Grammata

Training induces lasting memories of humans in horses

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The aim of this study was to investigate the effects of using positive reinforcement as a training strategy for young horses on the horse-human relationship. Thus, we trained 23 yearlings to remain immobile and accept various handling procedures (brushing, feet picking...) on vocal command, giving half of them a food reward (positive reinforcement group, NPR = 11) whenever they responded correctly to the command (i.e. remained immobile throughout the handling procedure), while the other half (control group, NC = 12) was never given any reward. Results showed that using positive reinforcement during training induces a long term positive representation of humans, for young horses trained to obey a vocal command with food as a reinforcement sought and accepted more contact, both with the familiar trainer ($P < 0.001$ and $P < 0.01$) and with a non familiar person ($P < 0.01$ and $P < 0.01$), even several months after completion of training (up to 8 months later). It also allowed faster learning ($P < 0.001$) and better memorization of the task ($P < 0.05$).

Horses (*Equus caballus*) are sensitive to human attentional states in requesting food.

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The ability to reliably detect what others attend to seems important for social species to interact with their partners. Domestic horses (*Equus caballus*) have lived with humans for over 5000 years, hence they might have developed sensitivity to human attention. In the present study, we investigated whether horses understand the role of eyes as an index of human attentional states and differentiate begging behaviors depending upon the experimenter's attentional states. We used, with a slight modification, the paradigm that previously yielded support for chimpanzees' understanding of human attention (Hostetter et al. 2007). Sixteen horses were offered food by the experimenter who showed various attentional states in front of them. We scored frequency of begging behaviors by the horses. In experiment 1, we set two experimental conditions (hand over the mouth and hand over the eyes) and one control condition (Experimenter absent). The results showed that horses tended to produce more auditory/tactual begging behaviors when the experimenter's eyes were not visible than when they were visible but there was no difference in visual ones. In experiment 2, we tested two experimental conditions (eyes open and eyes closed). The horses produced more auditory/tactual begging behaviors when the experimenter's eyes were closed than when they were open. However, there was no difference in visual begging behaviors. These results show that horses discriminate the situations in which humans can see from those in which they cannot. Of special interest, horses increased only auditory/tactual behaviors, not all types of communicative behaviors, when the experimenter could not see them. Our study suggests that horses are sensitive to human attentional states. Moreover, horses may recognize the eyes as an important indicator of whether or not a human experimenter will respond to their behavior and may be able to behave flexibly depending upon human attentional states.

What kinds of music/sound will be beneficial for companion animal dogs at home alone?

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One of the concerns which people have about their companion animal dogs in Japan is whether their dogs can be calm or not while the dogs are at home alone. An attempt has been made to search for an effective music/sound which will keep a companion dog calm at home alone. The following five kinds of CDs were prepared: CD1; "healing" classical music, CD2; "modulated" classical music, CD3; CD1 with comfortable sound for both people and dogs, CD4; CD2 with uncomfortable sound for both people and dogs, and CD5; Japanese drumming music. Eight university students and his/her dog participated in this research. Whenever the dog was at home alone, the activity measuring unit was attached to the dog's neck. The research was conducted during the weekdays for seven continuous weeks; no CD was played during the first and last weeks, and during the remaining five weeks, a CD was randomly assigned each day.

The correlations between the times which the dog was at home alone and the total activity levels during that time were analyzed. A total of 256 data points was collected for approximately 5 months. The results of CD2, CD3, and CD4 showed that the correlations coefficients were statistically significant ($p < 0.05$); in other words, the longer the time the dog was at home alone, the higher the activity level was. The regression models were developed for these CDs to investigate their effectiveness in terms of the activity level. Interesting findings were that, up to approximately 300 minutes, the "modulated" classical music was recommended to play at home; however, if the period was longer than that, the "healing" classical music with comfortable sound for both people and dogs was found to be the most beneficial music/sound for the dogs.

Effects of behaviour therapy for domestic cats with problematic behaviour on owner reports of emotional support

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Behaviour that owners perceive to be problematic is an important factor in the breakdown of the bond between owner and cat, and can lead to relinquishment to shelters or euthanasia. There has been very little systematic research on the effects of problematic behaviour on the cat owner bond. The aim of this study was to compare owner-reported levels of emotional support (ES) before and after a programme of behaviour therapy.

The owners of 97 cats with reported undesirable behaviour (clinical group) were recruited, and also 51 cats matched for breed, age and sex, whose owners reported no undesired behaviour (control group). Each owner was visited in their own home, and were asked to complete an ES questionnaire. Each cat was given a full behavioural assessment, and the owners in the clinical group provided an overall rating of their perceived severity of the behaviour problem(s), before being given an individual programme of behaviour therapy. At a second visit eight weeks later, owners were asked to complete the same questionnaires.

In the clinical group, the owner reported levels of ES were negatively correlated with their severity scores at the first visit (Spearman $\rho = 0.36$, $P < 0.01$), i.e. the more severe their perception of the problematic behaviour, the less emotional support they obtained from their cat. ES had significantly increased at the second visit (Wilcoxon $Z = -2.54$, $P < 0.05$), and was weakly correlated with the improvement in clinician severity rating ($\rho = 0.27$, $P = 0.01$). In the control group, the level of ES reported by owners was similar between the first and second visits ($Z = -0.68$, $P = 0.50$). It appears that the successful implementation of a programme of behaviour therapy does have a positive effect on the emotional component of the cat owner bond.

Are veterinarians attentive to the human-animal bond when discussing the costs of veterinary care?

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"The bond between people and animals is the primary basis for our professional existence."

Leo Bustad, DVM

Ironically, a common threat to the bond between pet owners and their animals is the cost of veterinary services. To date, research in North America relating to such costs has focused primarily on clients' sensitivity to fees paid for veterinary services (Brown and Silverman, 1999; American Animal Hospital Association, 2003). This research has found North American pet owners in general consider the cost to be low relative to the value of their animal. However, findings of a recent focus-group study conducted by the authors and involving 32 pet owners and 24 veterinarians from Ontario, Canada suggest that inadequate discussion of cost within veterinarian-client-patient interactions is a concern for pet owners and whether the information is conveyed by veterinarians in a way that recognizes the human-animal bond is an area of potential contention for clients and veterinarians (Coe et al, 2007).

Results of that focus-group study and a subsequent observational study involving 20 randomly selected veterinarians and 350 pet owners from Ontario, Canada which was developed to examine the prevalence and nature of cost discussions in veterinary practice will be presented. A dataset of 200 video-recorded veterinarian-client-patient interactions, randomly selected from all those recorded, was coded using the Roter Interaction Analysis System (RIAS). Additional coding was added to the RIAS framework to capture the prevalence and nature of cost discussions. Of the coded visits, 29% included a discussion of cost (Coe et al, 2009). In the majority of discussions, veterinarians presented costs to clients in terms of time and/ or service being provided rather than in terms of health benefits to the animal.

Overall, findings suggest clients expect veterinarians to discuss costs in the context of the health and well-being of their animal and veterinarians need to consider this by being more attentive to the human-animal bond when discussing the costs of veterinary care.

In what situations do veterinarians approve of euthanasia of companion animals in Japan?

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Background

Decision-making on euthanasia of companion animals is very hard, not only for owners but also for veterinarians. In Japan, there are few studies on euthanasia of companion animals, and how veterinarians perceive it and actually face it is not well understood. A nationwide questionnaire survey was conducted to reveal veterinarians' decision-making on euthanasia in Japan.

Method

Questionnaire forms containing questions on approval/disapproval of euthanasia in various situations were sent to 3,000 veterinary hospitals randomly selected from a telephone directory. A total of 932 forms answered by veterinarians in small-animal practice were used for analysis.

Results

Respondents tend to approve of euthanasia of companion animals when there is no hope for the animal to recover and the owner demands euthanasia at the same time. They tend to disapprove of euthanasia when there is a chance for the animal to recover, even if the owner cannot afford treatment and demands euthanasia or even if the animal's quality of life [QOL] would decrease after treatment. They also tend to disapprove when the owner demands treatment, even if there is no hope for the animal to recover, or the owner's QOL is decreasing, or the owner cannot afford treatment.

Discussion

For veterinarians in Japan, to approve of euthanasia of companion animals, there are two conditions: "no hope for the animal to recover" and "the owner demands euthanasia." If either condition is not met, the veterinarians disapprove of euthanasia. A decrease in the animal's or the owner's QOL and inability to pay for treatment are secondary factors in deciding on euthanasia. The findings suggest that Japanese veterinarians' decision-making on euthanasia is backed by Japanese values, in that "being alive" is considered more important than QOL and they would prefer not to be the ones who put the animal to death.

Practical guidance for the effective response by veterinarians to suspected animal cruelty, abuse and neglect

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An ongoing programmatic issue in the link between animal cruelty and human violence is the role of veterinarians in recognizing and responding to animal maltreatment. A key obstacle to recognizing animal cruelty, abuse and neglect has been overcome with: the emergence of veterinary forensics as a specialty training; textbooks that assist practitioners in making a differential diagnosis; founding of an international veterinary forensics organization; and the development of university and continuing education training. Other barriers have been lowered through: laws granting veterinarians immunity for reporting suspected abuse; professional association policies encouraging making such reports; and increasing public awareness of this issue.

For veterinarians to respond effectively to animal abuse in a manner comparable to their human medicine colleagues vis-à-vis child maltreatment, another obstacle must be overcome: the development of policies that account for economic, ethical, liability, legal, safety, and practice management concerns. To date, discussion of these issues has been largely theoretical and has not resulted in concrete protocols that fully answer concerns voiced by the profession.

Practical guidelines for the effective response to suspected animal cruelty, abuse and neglect are being developed in the US and UK with potential international applications. These guidelines include a Risk Assessment and Reporting decision tree, a Client Questionnaire, and digests of relevant statutes and national policies that may be utilized when presenting factors lead to a raised index of suspicion of animal maltreatment.

This workshop will present an effective response to suspected animal maltreatment that balances the interests of the patient, the client, other animals and persons in the household, and the practice. Participants will be encouraged to further identify issues that should be included in a veterinary practice protocol regarding client education and, when warranted, referrals to community agencies, when animal maltreatment is suspected.

Owner visitation: Clinical effects on dogs hospitalized in an intensive care unit

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The commitment level of people to their companion animals, their concern for their ill pets, and willingness to have them treated forms a foundation of companion animal veterinary medicine. Identifying optimal pet care during critical illness and hospitalization may seem a clear medical process, but little attention has been directed to the effects of animal owners maintaining contact while their pets are hospitalized. Views differ as to whether visitation is beneficial to the pet, the client, or both, or whether it may be detrimental. Heart rate (HR) and mean arterial blood pressure (BPMAP) increases, and pain levels may be indicators of stress in hospitalized dogs.

In the first study of this topic, we aimed to identify effects of owner visitation on HR, BPMAP, and pain in dogs hospitalized in an intensive care unit. A one-group repeated measures pretest-post-test design was used to study hospitalized dogs. At four intervals during the owners' visit, the dogs' HR was determined by palpation or auscultation, BPMAP was measured using a portable Cardell Vet Monitor, and a pain score was assigned using a modified Glasgow Composite Measure Pain Scale.

Sixteen owners (13 females, 3 males, Mean age=52 years) and their hospitalized dogs (Mean age=7.5 years) participated. There was an increase in the dogs' HR from baseline (Mean=100 beats per minute) compared with 5 minutes after the visit began (Mean=110; $p=0.0079$), and 5 minutes before the owner left (Mean=112; $p=0.0458$). The dogs' HR decreased 5 minutes after the visit ended (Mean=108; $p=0.1552$), but not below baseline. The dogs' BPMAP levels increased steadily through the visits, though these were not significant (Baseline Mean=115, 5 minutes into visit=122 { $p=0.22$ }, 5 minutes before end of visit =124 { $p=0.05$ }, and 5 minutes after visit=126 { $p=0.10$ }). Dogs' pain scores decreased from baseline to 5 minutes into the visit (Mean=2.20 to Mean=0.70; $p=0.50$). Data collection is ongoing. Behavioral observations of dogs during visits will enable interpretation of the clinical findings as to whether they indicate the dogs were stressed or invigorated by owner visits. These findings will also be presented. This research may give dog owners insight into whether or not visiting their hospitalized dog is advisable for the dog.

A comparative study of the efficacy of group equine assisted counseling with at-risk children and adolescents.

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Equine assisted counseling (EAC) is the incorporation of horses into the counseling process to facilitate the therapeutic outcome. With EAC, individuals interact with horses in order to facilitate the prevention or resolution of emotional and behavioral difficulties with themselves and others. Mental health therapy with horses is thought to assist participants in ways unique and sometimes superior to more passive counseling formats. EAC provides a safe and secure environment that nurtures inner healing and encourages optimal growth and development. This study demonstrates the efficacy of EAC by comparing it to passive classroom-based counseling (RD). Students ($n = 164$) identified as being at high risk for academic and/or social failure participated in 12 weekly counseling sessions. Within-group paired sample t-test results comparing pre- and post-treatment scores on the BASC Self- and Parent-Reports for externalizing, internalizing, maladaptive, and adaptive behaviors determined that the EAC group made statistically significant improvements in 17 behavior areas, whereas the RD comparison group showed statistically significant improvement in only 5 areas. Between-groups ANCOVA results indicated that the EAC showed statistically significant improvement in 7 areas when compared directly to RD. Also, repeated measures ANOVA of the EAC participants' social behavior ratings on the Psychosocial Session Form showed statistically significant improvement with increases in positive social behaviors and decreases in negative social behaviors. The effect of EAC on internalizing problems is promising because it denotes a noticeable increase in participants' ability to internally cope with their problems and seem less lonely, less depressed and less anxious. The BASC results also support EAC as effective for improving adaptive skills, such as leadership, adaptability, and social skills in children and adolescents. This is very important because adaptive skills are complete or exact opposites of problem behaviors and yet a lack of adaptive skills often goes undetected and untreated.

The impact of equine assisted learning as an intervention aimed at promoting psychological and social well-being amongst young people with behavioural issues

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Equine (horse/pony) Assisted Learning is a learning-centred experiential education process used to assist young people, adolescents, and adults in learning about themselves. It also allows people to develop tools and strategies for making good choices and facilitating new insights and awareness. It is used to assist people to develop problem solving and communication skills, build healthier relationships and improve self-confidence.

This project aims to examine the impact of equine assisted learning as an intervention to promote the psychological and social well-being of young people between 11-17 years of age with behavioural issues. Festina Lente Foundation has been providing an equine assisted learning service in the greater Dublin area since 2006. Each programme consists of 8 sessions with each session lasting approximately one and a half hours. Sessions are facilitated by a facilitator and an equine specialist. Specifically the equine assisted service focuses on facilitating participants to develop communications, self-awareness, relationships and social skills.

The project will use a mixed methods research design including quantitative and qualitative approaches. Data will be collected through quantitative questionnaires and individual qualitative interviews with young people, parents/guardians and teachers participating in the study.

Questionnaires assessing the key variables will be completed pre and post each programme. Interviews exploring these issues will be completed one week after the end of the programme. There will be a follow up 3 months after completion of the programme, which will involve both questionnaires and interviews.

Participants are male and female and between the ages of 11 and 17, the parents/guardians and teachers of the young people. Participants are referred by schools, family resource centres and support groups with responsibility for young people. All the young people referred have presented with behaviours that currently exclude them or run the risk of excluding them from mainstream education and/or mainstream settings and/or whose behaviours have interfered with their ability to develop and/or maintain healthy relationships with their peers.

Dog-assisted group training (MTI) with mentally disordered prisoners: enhancing social interactions

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Objectives

Social competences are leading influential factors regarding human development and interpersonal interaction (Petermann, 2006). Especially criminal offenders are known to have problems in these areas, which can lead to problems concerning social reintegration. Numerous studies underline the supporting social impact of animals on people (Kotrschal & Ortbauer, 2003). The present study's goal is to evaluate the positive effects of an animal assisted intervention (Multiprofessionelle Tiergestützte Intervention, MTI), on the abilities of social interactions of mentally disordered prisoners.

Methods

To analyse the interesting constructs, an observational system (Stetina et al., 2008) was slightly modified and used. Ten mentally disordered prisoners most suffering from paranoid schizophrenia received the animal assisted training MTI once a week for twelve weeks while video tapes were created using two video cameras. The material was systematically analysed by two independent observers using rating scales and an index system. Indicators for the analysis of social interactions were ability of teamwork, communication and empathy. Statistical analysis included diverse statistical inference procedures including GLM for repeated measures to test the hypotheses.

Results

The observer congruence was satisfying in all scales. The participants showed significant and relevant improvements between the observation times in different fields of social interaction, e.g. "communicational abilities" ($F(2, 684)=25.47, p<0.001$), empathy ($F(2, 684)=4.74, p=0.009$) and adequate attitude ($F(2, 684)=5.22, p=0.006$). Improvements regarding "facial expression" ($F(2, 684)=7.68, p=0.001$) and the regulation of emotions ($F(2, 684)=7.89, p<0.001$) were found.

Discussion

Statistical analysis of the observations shows significant changes in subscales during the training. Although mentally disordered participants are usually limited regarding their communication abilities and social competences, the prisoners improved their communication, their team ability and learned to deal better with their emotions. Based on previous evaluation studies and on the monitored enhancements of the present study, MTI can be recommended as an activity for health promotion.

Substance abuse treatment in prison vs. rehabilitation center: effects of a dog-assisted group training (MTI) on emotion regulation and emotional self-control in different institutions

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Deficits in emotional competencies are notorious risk factors concerning addictive behavior (e.g. Beck et al. 1997). The strong relation between self regulation, self control and drug use has frequently been documented and is therefore a major part of the present study. The goal of the current study was the comparison of the dog-assisted programme MTI in two different institutions (correctional facility vs. drug addiction rehabilitation center) and evaluations concerning the therapeutic effects of the different settings and interventions for drug-treatment. Within a drug rehabilitation center and a correctional facility (special prison for drug addicted criminal offenders) 75 male participants were examined regarding their emotional competencies and emotional status using a quasi-experimental pre-post design. Two treatment groups (n=36 drug addicted criminal offenders, n=14 drug addicted rehab patients) participated in the dog-assisted training MTI. Another treatment group (n=13) took part in a work related rehabilitation programme the fourth group (n=12) solely received the base treatment containing group therapy. The instrument used was the SEE (Behr & Becker, 2004) and the hypotheses were analyzed using diverse statistical inference procedures, such as GLM with repeated measures including calculation for effect sizes. Participants of the two dog-assisted trainings MTI showed significantly higher improvements than the two other groups concerning emotional self-control ($F(3,71)=5.893$, $p=0.001$, $\eta^2=0.199$) and regulation of emotions ($F(3,71)=4.422$, $p=0.007$, $\eta^2=0.157$). Pre-test results indicated, that the rehabilitation center participants had significantly fewer emotional skills, especially concerning emotional self control and emotional regulation, than the imprisoned participants. Results after the dog-assisted training showed significant improvements in these areas. Although the changes seem to be strongest for the emotionally more deprived participants in the drug addiction rehabilitation center, all groups benefited from the training due to the human-animal interaction. The results even suggest that AAT might be even more valuable than other therapeutic programs regarding regulation of emotions and emotional self-control of drug addicted people.



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Animal Assisted Therapy as a supplement to traditional rehabilitation of stroke patients - a pilot project at Sunnaas University Hospital

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There is a lack of scientific studies using animal assisted therapy (AAT) to improve rehabilitation of stroke patients. Clinical signs like motor, sensory and cognitive deficits are classically recognized in stroke patients. Stroke is often followed by depressive disorders and anxiety, which in such patients correlate with physical and cognitive functional problems. This project aimed at analyzing whether AAT with a dog could have positive effects on patients during rehabilitation from stroke, and investigate any correlation between the human-animal interaction and measured effects. This was a randomized controlled pilot study involving 21 patients admitted to Sunnaas University Hospital outside Oslo. The intervention involved interaction with the dog for 15-20 minutes, three times per week during 6 weeks. Validated physiological and psychological tests on depression, anxiety, quality of life and ADL function (Activities of Daily Living) were used to analyze for effects of the AAT. The interaction between patient and dog was analysed by video records taken once a week, using The Observer programme. Inclusion criteria: patients admitted to hospital with a diagnosis of acute stroke according to the World Health Organization criteria, >16 MMS score, and that they agreed on being video recorded during AAT, being interviewed, and being exposed to the validated tests. The control group received ordinary training while the intervention group received AAT in addition.

The results showed a correlation between the calming effect patients claimed feeling after the intervention and how much contact they had with the dog ($r_s = 0,88$; $p < 0,0005$). Direct effects of AAT on other mental and physical measures were not found in this rather short-term study. Overall the patients and the therapists at the hospital were satisfied with participating in this project, and most of the patients would like to continue the AAT. Nurses at the hospital expressed that they would recommend AAT as an addition to the regular rehabilitation of stroke patients. This project has given valuable experience to be used in further studies on AAT with stroke patients and the method may be used on other patient groups, especially institutional patients.

The horse as a therapeutic tool - equine assisted therapy, well-being and quality of life after stroke

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Introduction

Socializing with animals is supposed to satisfy a basic human need and to contribute to psychological, physical and social well-being. In Sweden, interacting with horses and horseback riding are considered to contribute to human health in general, and equine assisted therapy is recognized as a tool for rehabilitation purposes.

Stroke

Stroke is a disturbance in the blood supply to the brain. In Sweden, the incidence is 25 000 new cases of stroke annually. It is regarded as the main cause of lifelong disability in the adult population. Stroke affect functions as for example the capacity of moving, cognition and speech. Irrespectively of how the recovery proceeds and which dysfunctions remain, for most persons life has radically been changed.

Aims

A research project was conducted aiming at investigating whether the communication between rider and horse in Equine Assisted Therapy (EAT) could promote physical and mental capacities, stimulate the lust of learning and increase the quality of life and dignity for persons with life long disabilities after having been subjected to a stroke.

Method

Four persons with the diagnose stroke participated in the study. Their symptoms included physical, psychological, cognitive and speech disorders. The EAT was conducted once a week for 20 weeks. Each session included horse care and 30 minutes on horseback. The sessions were individually designed regarding to the participants disorders, for example to facilitate movements, decrease muscular tonus, increase the ability to concentrate and to perform activities simultaneously. The participants were interviewed during the period, both individually and in group settings. Those were conducted as dialogues around topics related to the aims of the study and analyzed according to a hermeneutic method.

Results/conclusions

The project shows that EAT can promote processes for learning, re-establish a person's sense of dignity and contribute to feelings of well-being and quality of life after having been subjected to stroke. EAT, e.g. horseback-riding, taking care of and communicating with horses, was regarded by the participants as a meaningful activity in its own right. These kinds of actions are of central importance in theories on human well-being and quality of life.

Engagement with therapy - re-engagement with life: using AAT within brain injury rehabilitation

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This study involved the integration of Animal Assisted Therapy (AAT) in therapy services provided in a rehabilitation setting to young adults with acquired brain injury. Specifically, the study examined the extent to which integrating AAT within 'traditional' therapy influenced an individual's engagement in therapy sessions and their mood. Accredited dogs and their handlers worked with therapists as part of individuals' rehabilitation. Using a single case design with a sample of twelve participants, individuals' progress was compared against their own baseline measurements. Within the six-week program for each participant, a 'cross-over' approach was used to control for spontaneous improvement in mood and engagement. Outcome measurements included mood scales and qualitative interviews, as well as observations by therapy staff.

The analysis of results shows that AAT encourages and facilitates engagement with traditional therapy - an important step towards re-engaging in life. Another benefit identified through the study was the improved mood status of participants. Given that many people with acquired brain injury suffer from associated depression or flattened mood, the evidence of positive shifts in mood holds significant implications for facilitating functional recovery and re-engagement with life outside the rehabilitation facility. Spin-off benefits were also evident and included: reported lowered frustration for therapy staff who were more readily able to engage participants in therapeutic activities when using AAT; a sense of 'normalisation' of the environment within which both participants and staff were situated; evidence of positive foci for communication between participants and their family members, and between participants and rehabilitation centre staff. Overall, while the sample was too small to say conclusively that the outcomes were the result of AAT alone, the results are promising and have formed the basis for a more comprehensive AAT program to be established.

Comparative study of the effects of Animal Assisted Activity and Music Therapy in nursing home in terms of physical activity and autonomic nervous system

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Introduction

Many different kinds of therapeutic or recreational activities, such as Music Therapy (MT), Horticulture Therapy and Language Game Activity are used in nursing homes in Japan. One of those activities, Animal Assisted Activity (AAA), has become increasingly popular because it improves the residents' quality of life in nursing homes. However, the effects of AAA have not yet been fully compared with the effects of MT. Therefore, it was necessary to assess the differences between the effects of AAA and the effects of MT.

Method

This research was conducted during 9 months. Both AAA and MT were executed as group sessions once a month in 2 nursing homes. The amounts of physical activity and the heart rate variability (HRV) of the 8 residents (85.3 ± 7.1 yr) who are participating in AAA and MT were measured. They have different levels of dementia and activities of daily living. The residents participated in AAA and MT 6 times each. The HRV was estimated by calculating the power spectrum density of R-R interval waveform (RRI). Low frequency-to-High frequency ratio (LF/HF) was used as sympathetic nervous system activity index.

Result

The amounts of physical activity of the residents tended to be lower during AAA than during MT. Moreover, the RRIs for 8 residents were significantly longer during AAA than during MT ($p < 0.01$). In addition, the LF/HFs for 6 of the residents were significantly lower during AAA than during MT ($p < 0.05$). These results showed that those 6 residents were more mentally and physically relaxed during AAA than during MT. Therefore, it was suggested that AAA is more beneficial than MT when the goal is relaxation.

Do dog owning children have more friends and higher social skills than non dog owning children?

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Introduction

In Japan, ca. 13 million dogs are kept as pets and dogs have become family members. Studies have shown positive effects on socio-emotional and cognitive development on children who own dogs (Hergovich et al., 2002; Kotrschal et al., 2003). In contrast, no significant changes in the frequency of social interactions with peers before and after children had a dog (Serpell, 1996). Our objective of this study was to reveal the association between dog owning and network of friends on children in Japan. Our hypothesis is that dog owning children (DO) would have more friends and higher social skill than non dog owning children (NDO).

Methods

Two groups of children, aged 6 to 12, were surveyed: 37 dog owners and 47 non dog owners. These children completed self-report social skills scales (Fujieda, 2001) and a questionnaire. On the questionnaire, children wrote down the names of important friends, and then we tallied these for each. The DO completed the Companion Animal Bonding Scale (Poresky et al., 1987) and were asked how often they care for their dogs (playing, giving food / water, etc.).

Results

We compared mean numbers of important friends within DO and NDO. Using Mann-Whitney U tests, no significant difference was found (DO vs NDO: 5.46 vs 4.26, $U = 975$, $n = 82$, $p \leq 0.08$), although there was a tendency. In addition, there were no differences between two groups on the self-report social scales, and all of children scored low on the withdrawn factor. Within DO, no correlation was found between attachment to dogs and mean number of important friends. While all of children played with their dogs, younger grades played more often with them. Interestingly, 14.3% of the lower grades never had experienced giving food / water to their dogs, whereas the entire upper grades always or often do that. Therefore, the way of interacting changes with age.

Conclusions

Contrary to our hypothesis, results showed no association between dog owning and social network, although there was a tendency. In addition, no correlation was found between attachment to dogs and social network. The subjects of this study scored low on the withdrawn factor; therefore it suggests that dogs might still help the social skills for withdrawn children but not for affirmative children.

The influence of animal assisted education on social competence of kindergarden children

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The study was conducted to examine whether children who attend a so called Bauernhof kindergarden (where the kindergarden is integrated on a farm with companion and livestock animals, n=18) show higher levels of social competence than children who attend a regular kindergarden (n=26). This hypothesis arose from studies which revealed positive effects of pet ownership on the child's social development, especially on his or her social competences. The social competence was defined as appropriate behavior in a group decision situation and was examined on two different dimensions. As decision situation task the Consensus Rorschach Test was used. Groups of three randomly selected children were asked to find a conjoint solution on ten different pictures of inkblots. First we analyzed the videotaped behaviour of each child during the group decision task by using Interact-Software for behavioural analysis. Second the parents as well as the kindergarden teachers rated the current social and emotional developmental level on a standardized questionnaire (VBV 3-6). To rule out the possibility of the parenting style being a mediator the parenting styles of the parents with children at the Bauernhof-Kindergarden were compared to these of the parents who sent their kids to the regular kindergarden by using the Alabama Parenting Questionnaire. No significant differences were found. In both tested dimensions children who owned pets showed significant higher levels of social competence than their peers without pets. They explained their suggestions regarding the solution for the inkblots more often and got higher ratings of social competence by their parents. Children who attended the Bauernhof-Kindergarten also explained their suggestions significantly more often to their peers and were more engaged during the decision process. We conclude that pet contact improves basal social skills in children. Farm kindergardens represent an alternative if families are not able to keep pets at home (e.g. due to allergies of family members). Positive effects of pet contact on childrens' team skills could also be found in children who only had pet contact in the farm kindergarden but not at home. They achieved higher scores regarding social skills than children without any pet contact.

Key elements of AASEL®, animal assisted social emotional learning and therapy, in preventing the need for fostercare of behaviorally challenging school-age-boys

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The number of school-age-children with emotional and behavioral issues is constantly rising. They are not in need of psychiatric care, say the medical professionals, yet they are in serious trouble at school, at home and in freetime. There is emphasis on prevention but inefficient intervention methods available result in rising number of placement of school-age-children to professional group-homes and other residential facilities. We designed for such families a year-long program called HeroicJourney® utilizing AASEL®, Cavesson's model of animal assisted work.

Group of seven to nine year old boys and group of twelve year old boys spent 30 weekly three-hour-sessions and a five-day-summer camp at Savikko. Their parents had to commit to parents' groups that met 22 times over the year. Teachers were invited to visit the kid's groups any time they wanted to. The hypothesis was in two parts; one can limit, reprimand, and control a child only if the relationship is first based on functioning communication, mutual love, respect and trust. To heal the family's dysfunctional relationships and consequently prevent the need for more dramatic interventions, we need to work with the whole family, every one individually yet in group and family context. And we need to get some results very quickly to eliminate immediate need for fostercare. Second part was the idea that if we combine all known elements of effective interventions with our progressive program of animal assisted social emotional learning, we can change thinking, emotional reactivity, behavior, and strengthen the family relationships. Change requires activating the frontal lobe of the brain. Working with AASEL® activates the frontal lobe and keeps the individual challenged yet feeling safe, motivated and consequently able to reflect on and change own patterns of thought, emotion and action.

The results were 100% success rate in preventing the need for fostercare. 50% have not been needing any more Child Welfare interventions (follow up 1 year) and the remaining 50% have only had some complaints from teachers about disturbing lessons or not completing assignments, which may have resulted also from teachers' heightened sensitivity. Two teachers visited one group once.

Horses teaching life skills

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Since 1976 horses have taught life skills at the Fortune Centre of Riding Therapy (FCRT) in the UK, primarily through a residential three year Further Education Through Horsemastership (FETH) Course. The paper will describe the work done at the FCRT using skills transferred from an equine environment into skills of daily living. Students whose educational needs cannot be met in government provision are government funded on the FETH Course. Students develop skills in literacy, numeracy, money management, and communication by learning through equine teaching and activity. Teaching is in context and in the moment. The paper will explain the work of the FCRT. (www.fortunecentre.org)

A dog-assisted program to enhance reading skills in a school setting

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Different programs using the calming and motivating effects of dogs to enhance reading skills in children emerged during the last decade. The majority of these programs work on a one-to-one basis and outside the regular classes. A 12-week, dog-assisted-program to enhance reading skills within the regular school setting was designed for the growing number of teachers who integrate their own dogs into their classes. The training is conducted in groups of 6-7 students with low reading performance. The students can interact with the dog while reading from a selected book with a dog-theme in the group. In addition, the child who read the last paragraph is allowed to perform a trick with the dog. The program was tested in a pilot study with 5th-graders (age 12-13). The intervention group (N=6; all male) received the dog-assisted program, the control group (N=7; 2 male, 5 female) received the same program by the same teacher but without the dog. Reading skills were assessed with two standardized tests before (t1) and at the end (t2) of the 12-week intervention, and 8 weeks later (t3; after summer break). School-related self-esteem was assessed via a questionnaire (ALS). Interviews were conducted at the end of the program. The reading skills of the children in both groups improved during the course of the training. A significant increase was found in comparison of t1-t3 ($t=-5.40$, $p=.000$) and t2-t3 ($t=-4.01$, $p=.002$) indicating that the program shows its effects during the actual intervention period and also after its end. However, differences between the groups on the reading tests were not significant. Only among the dog group, school-related feelings of self-esteem remained stable during summer-break. In the interviews, all participants indicated a preference for the program with the dog. Even though both programs were effective, this finding is important with respect to the students' motivation to continue reading by themselves after the program ended. Supported by a grant of the Industrieverband Heimtiernahrung (IVH) e. V.

Development of a measure to assess the use of animals in NAEYC accredited early childhood centers

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Animals have been a part of early childhood experiences for many centuries. Early childhood educational settings are increasingly using animals as part of their classroom environments and curriculum. The goal of this session is to present a measure, currently in development, that will assess the use of animals in early childhood classrooms that are considered high quality according to their status as accredited by the National Association for the Education of Young Children (NAEYC) organization in the United States. The measure will be designed to, among other items, determine the number and types of animals being included in early childhood classrooms; the ways that animals are being included (classroom pets, zoo visits, etc.); the value that teachers and administrators place on having animals in the classroom; and how these values influence the choices of including animals and to what extent they are included. This session will be a discussion of the measure to include attendee feedback designed to strengthen the measure before initiating a pilot study in the fall of 2010.

Considerations for classroom-based research involving animals: A case study into the significance of an animal-assisted literacy program for one class of grade 2 children

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Millions of children in North America continue to struggle with reading. In response, animal-assisted literacy programs, which involve a child reading aloud with a trained 'therapy' dog and a volunteer mentor on a regular basis, have become increasingly popular. Such programs have been established in 4 Canadian provinces, 43 U.S. states, and in Australia, the U.K., Italy, and India. Despite the global media attention animal-assisted programs have enjoyed, little research has explored the potential benefits and concrete practicalities of these programs for young learners in classrooms. While attending carefully to pedagogical best practices in literacy, this study aims to attain a deep understanding of the significance of animal-assisted literacy learning for one class of grade 2 students. An interpretive case study is well suited for studying this educational innovation because case studies seek a level of analysis which provides insights that affect and improve practice. For a three-month period, I visited the classroom for two mornings each week with my two trained therapy dogs which are non-shedding Maltese-poodles. During this time, the students were invited to sign up for 20 minute individual or paired literacy sessions (which may include reading, writing, speaking listening, viewing, and representing) with me and one therapy dog of their choice in a divided section of the classroom during regular language arts class periods. Data for this study was collected through video and audio-taping of the literacy sessions, audio-taped interviews with students, the teacher, the teaching-assistant, and parents of the students, a 'dog-blog' with the children, and the collection of relevant student literacy artefacts. This power-point session will feature the research design while highlighting special considerations for doing classroom-based research with animals, and will offer preliminary results of this study.

An assessment of the 'Paws for Tales' dog-assisted reading program

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The use of therapy dogs has been gaining popularity in animal assisted education. However, there is very little research on programs that promote literacy by encouraging children to read books to dogs in libraries. Studies have shown that the presence of a dog reduces stress and promotes relaxation (Burton, 1995; Friedmann, 2000; Friedmann & Thomas, 1995; Hart, 2000; Serpell, 2000, Wilson, 1991). Further, dogs provide a safe, non-judgmental atmosphere, making it more comfortable for a child to open up and communicate with a counselor in a therapy setting (Burton, 1995; Chandler, 2001; Nebbe, 1991). It follows that reading aloud to a dog may help children gain confidence in their skills and increase their enjoyment of reading, particularly if they face language, learning or emotional challenges.

Non-participant observation and semi-structured audio-taped interviews were conducted with children, volunteers and librarians in the Peninsula Humane Society and SPCA "Paws for Tales" reading program at libraries in San Mateo County, California, USA. Parents filled out questionnaires on their child's experiences with both reading and with dogs. Data from interviews and questionnaires were analyzed to find themes.

A general description of reading programs and therapy dog and volunteer training was reviewed and analyzed with suggestions for future refinement and development of animal assisted reading programs. Themes were based on feelings and perspectives of participants, librarians and volunteers for the "Paws for Tales" program. Several themes emerged, including children's enjoyment of interacting with dogs and reading, attachment to dogs, projection of emotions onto dogs, and the non-threatening and comfortable situation created by dogs.

Comprehensive training for dogs and volunteers and involvement of human service professionals is discussed as an important aspect for the effectiveness of future reading programs.

Short-term interaction between dogs and their owners - effects on oxytocin, cortisol, insulin and heart rate

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The aim of the present study was to determine the levels of oxytocin, cortisol and insulin as well as heart rate in dogs and their owners in response to short-term interaction. In addition, relationships between the dogs' behavior and their hormonal levels were explored.

Ten female volunteers participated in the study together with their privately owned male Labrador dogs. During a 60 minute interaction experiment, the owner stroked, petted and talked with her dog during the first 3 minutes. Ten female volunteers served as controls and no dog was present during the control experiments. Blood samples were collected from both the dog and owner just before (0) and at 1, 3, 5, 15, 30 and 60 minutes after start of the interaction. Blood samples were analyzed by enzyme-linked immunoassay. Heart rate was monitored telemetrically. The experiments were videotaped and the dogs' behavior was analyzed as to position and movement from the videotapes. The dogs' oxytocin levels displayed a significant rise 3 minutes after start of the sensory interaction ($p=0.044$). Cortisol levels was significant increased after 30 minutes ($p=0.027$) and heart rate was significantly lowered during the experiment ($p=0.024$).

No differences in oxytocin, cortisol or insulin levels were observed between owners and controls. However, cortisol and insulin decreased in both owners and controls during the experiment ($p=0.058$, $p<0.0001$ and $p=0.041$ $p<0.0001$ respectively). Heart rate decreased significantly in owners ($p<0.0001$) but not in controls. Increased movement of the dogs' head was significantly correlated to higher cortisol levels ($r=0.642$, $p=0.045$). A significant positive correlation between the dogs' and the owners' oxytocin levels after 15 minutes ($r=0.721$, $p=0.044$) was found.

In conclusion, a short-term sensory interaction between a dog and its owner influence hormonal levels and heart rate in both species. Funded by grants from The Swedish Research Council Formas.

Measuring the impact of horses on humans

Beth Duff

Gentle leadership ltd, The red horse speaks, Newton of Corsindae, Midmar, Inverurie, United Kingdom

Objectives

The objective of this study was to collect and analyse data from a set of structured workshops in order to answer the following research questions:

- Are there particular groups or personality types which benefit most from learning with horses?
- Do horses have an impact on wellbeing?
- Does initial anxiety about horses impact on learning outcome?

The workshops formed the pilot study for my PhD research being undertaken at Edinburgh Napier University, Scotland where I am a part-time student in School of Life Science.

Method

Five workshops were arranged each for a maximum of six participants. All workshops were carried out in the barn at the red horse speaks premises in Aberdeenshire, Scotland with the same facilitators, the same horses, doing the same activities at the same time of day. The activities were selected to meet the learning outcomes and also because they could be done safely in the space available.

Learning was measured using Kirkpatrick's model of evaluating learning and development and anxiety and wellbeing were measured using self-scoring scales.

There were 29 participants, 17 men and 12 women ranging in age from 16 to 49 years (mean = 32.48 years). Their education ranged from 5 who had Standard Grades (or equivalent) to 6 who had post-graduate degrees.

Results

The pilot confirmed that this form of learning appears to be effective for people of all ages and experience. Significantly, it is enjoyed by all personality types – which is unexpected given that experiential learning is usually preferred by extraverts rather than introverts. Informal feedback suggests that the learning environment created by the facilitators and their style of delivery contribute significantly to learning outcomes.

Anxiety about horses at the start of the session does not affect learning outcome or enjoyment. Further work has been carried to find out which factors lead to a reduction in anxiety.

Participants also showed significant increases in well being.

Further more detailed studies are now being designed as a result of the outcome of this pilot study.

Anthropomorphic perceptions about animals and scientific biological approach - Students guide children with live animals in The David Yellin Academic College of Education

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Anthropomorphic perceptions about animals' life are common among children and adults, and are influenced by inner, emotional, and by external sources, such as books, movies and toys. In our course "Animal behavior and multimedia" students guide children in taking care of animals, and in learning, in a constructivist mode, about the animals' life and behavior. The students and the children work in the same teams, each team with the same animal, throughout the year. The students meet the children once a week for an hour, and then the students have another two hour session, discussing biological, social and emotional issues that were raised during the "animal hour" with the children. In the last four years, 48 students from the pre-school program at the David Yellin Academic College of Education, and 60 second grade children from the school affiliated with the college, enrolled in this course. Meeting animals in their real world of eating, social behavior and reproductive activities, raises the potential of cognitive dissonance between the anthropomorphic perception and the biological reality: "Why our hamster does not eat from the plate and hides the seeds under the paper?" "Why does our Rosemary (the tortoise mother) leave the eggs and does not take care of the baby tortoises?" etc. We found that the dissonance is greater when issues like parenting and other familial relationships are confronted. We present a model of dealing with this dissonance to enhance learning, and we discuss the benefits of dealing with this dissonance as a trigger for building a scientific, realistic approach, in addition to the anthropomorphic one.

AAT in the enhancement of emotional expression and emotion regulation: a video analysis of the dog-assisted group training MTI with adolescents

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Background

The positive effects of emotional competent behaviour on personal relations, health, work life and life-contentment have been documented in many studies (e.g. Goleman, 2002). Emotional regulation and expression are a prerequisite to show emotional competent behaviour and therefore they involve the use of diverse adequate, healthy or adaptive strategies. Animals have positive effects on individuals and especially dogs can help people deal with their feelings (e.g. Olbrich, 2003). They can assist individuals in approaching negative feelings more consciously as well as in expressing and coping with these emotions (e.g. Hart, 2000). The present study examined the effects of an animal-assisted intervention (MTI) on emotional expression and emotion regulation in children and adolescents in grammar school, by means of systematic behavioural observation due to video analysis.

Method

The sample consisted of 24 participants (male=10, female=14) aged 11 to 13 years. For the animal-assisted training units the class was divided into two groups. The interesting components were analysed using an observation system including rating and index for recording emotional competences (Stetina et al., 2008). The changes were evaluated using statistical inference (GLM) and effect size calculations.

Results

During the six summarized observation units the pupils, especially the girls, improved their "adaptive emotional regulation" ($F(5,23)=308.96$, $p<0.001$, $d=0.66$) and their "maladaptive emotional regulation" ($F(5,23)=31.89$, $p<0.001$, $d=0.50$). Furthermore, a decrease in the "expression of negative emotions" ($F(5,23)=57.43$, $p<0.001$, $d=0.71$) and an increase in the "expression of the positive emotions" ($F(5,23)=201.44$, $p<0.001$, $d=0.37$) was observed.

Discussion

The results of this study were able to confirm results regarding dogs in a classroom (e.g. Kotrschal & Ortbauer, 2003; Hergovich, Monshi, Semmler & Zieglmayer, 2002). Unlike other studies the present study is an intervention action (e.g. Turner et al., 2008). Multi-professional animal assisted intervention ("MTI") improves emotional expression and emotion regulation and seems therefore to be a promising way to improve health as it enables people to concentrate on their resources and increase their quality of life.

Promoting graduate study in human-animal interactions: the university of Denver graduate school of social work

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As interest in human-animal relations increases, it creates a need for competent clinicians with backgrounds in animal-assisted therapy and interventions as well as cadres of doctoral students studying the interactions between the lives of people and animals at all stages of human development. We describe the unique educational context at the University of Denver Graduate School of Social work in which students receive multidisciplinary training in animal-assisted educational and therapeutic practices and in research on human-animal connections. We believe that our graduate program is the only such program, internationally, located in a human welfare university context.

We describe a) courses in Animal-Assisted Social Work Applications and Integration of Animals in Therapeutic Settings, b) extensive, diverse internship and field-based experiences available to students. An online certificate program is also described. Developments in doctoral-level training are based on a "community of scholars" approach to the development of theory and research enhanced by our Scholars-in-Residence (Marc Bekoff and Sarah Bexell).

Annually, approximately 30 students complete the masters program. Since the first offering of the course, Integration of Animals in Therapeutic Settings, in 1999, 120 students have completed Animal-Assisted Social Work Certificates. Three students are actively pursuing doctoral degrees and we describe one student's exemplary dissertation research.

We consider our program vibrant and innovative. We are committed to evidence-based practice standards in animal-assisted social work and to the highest ethical standards when animals are involved in therapeutic and educational programs. We are also pleased to contribute to the development of future generations of scholars who will focus their professional careers on the exploration of human-animal connections. We invite contact from students who wish to pursue professional careers in this field and close with a description of the application process and forms of support offered by the University of Denver Graduate School of Social Work.

A French charter of best practices of the AAA

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Members Germa

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Attitudes towards the AAA, and the procedures to follow in setting them up, may differ from one country to another. In the French context, therapy is reserved for professionals in the area of psychiatry and psychology. Nevertheless, the development of "Pet therapy" and the TFA has led to French programmes wherein therapists do not belong to these professions. This has led to misunderstandings and in some cases to unfortunate opposition to such approaches, in particular as regards the social and institutional integration of such therapists. A multi-disciplinary group known as the GERMA(1) (including therapists and non-therapists) with members working in different types of institutions (hospitals, associations, etc) and with different types of animals (dogs, horses, farm animals), have been working in a wide range of different programmes: educational, social and healthcare. The group agrees on the principle that animal mediation should propose a charter of best practices adapted to our own specific cultural context.

The objective of our work is to propose a model document to specify the framework of good practices for the AAA. This framework will be used to define the status of each participating member (therapist) according to his/her different types of intervention.

A group of 20 participants met on four occasions from December 2008 until June 2009 and has worked in networks and thematic groups. Several proposals for the definitive version were discussed by the whole group before arriving at a consensus.

The document includes 12 articles which cover 1) the nature of the AAA programme (animation, the nature of the meditative relationship and therapy), 2) the statute and the training of the participating members animators, caregivers, and therapists) and 3) ethical and humane treatment of animals.

This work has enabled us to propose 1) specificities for training which correspond to the statute of each participant and the type of programme. 2) bringing together French participants on the basis of shared common values. 3) clarifying the status of each member to enable them to participate in and to collaborate with the different types of activities.

Helping the helpers: practical developments in the field of human-animal interaction at american humane

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Marie Wheatley

American Humane, President and CEO, Englewood, CO, United States

Three new programs from American Humane that span child and animal welfare will be presented.

The impact of being bitten by a dog at a young age can be long-lasting, physically and psychologically. Most adults do not know how to talk to young children about dog safety without scaring them. American Humane KIDS: Kids Interacting with Dogs Safely™ was created for 4 to 7 year olds, with a focus on the six Pillars of Character: kindness, respect, fairness, citizenship, responsibility and trustworthiness. The program includes a live action DVD, coloring books, seven lesson plans and activity packs. The program provides teachers and humane educators the tools to offer students the knowledge and skills needed to be as safe as possible around dogs while building a strong foundation of empathy and compassion.

The Therapy Animals Supporting Kids (TASK)™ program educates criminal justice and child welfare professionals how to safely and effectively incorporate therapy animals when working with children who have been abused. Included is: incorporating therapy animals as greeters at child advocacy centers, police stations, prosecutor's offices and court houses; and during the forensic interview, medical/sexual assault exam, group/individual therapy, court preparation and courtroom testimony. Incorporating an animal in therapy, particularly in the case of child abuse, is a specialized field which requires training in clinical application and animal handling skills. Specific examples of how a child with a trauma history benefited will be discussed.

Research documenting The Link® between violence to people and violence to animals recognizes that pets can become targets of batterers. American Humane's Pets and Women's Shelter (PAWS)® Program assists domestic violence shelters in housing pets on-site. Although many family violence shelters currently have cooperative relationships with animal shelters and rescue organizations, the pets in those instances are housed away from their family. The PAWS Program acknowledges the human-animal bond by encouraging shelters to allow family pets to enter the shelter with their owner. This enables the women and their children to keep their pets safe and benefit from the comfort of their company as they make a major life change together.

Pet-visitation: motivating factors and characteristics of volunteers and their dogs

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Volunteers make an extraordinary contribution in many areas of society. Pet-visitation programs are an increasingly popular type of volunteerism in Australia. Volunteers and their "accredited" dogs visit hospitals, rehabilitation centers, hostels and nursing homes with the aim of improving the quality of life and wellbeing of the people they visit. While research has been conducted on the effect of pet visitation programs, there has been little study of the volunteers involved. A survey was administered to 150 volunteers with the "Pets Are Loving Support" (PALS) program in Melbourne, Australia. Data were gathered relating to motivating factors, the structure of the visits, volunteer and dog characteristics and experiences. Volunteers tended to be older women who were largely still in paid employment, at some level, and had a history of volunteering. Volunteers were motivated by their wish to contribute to the community, to have fun and do something with their dog, specifically something where their dog helps other people, and want a meaningful pastime. Most dogs involved were purebred and were described as reliable, socially confident, energetic and relaxed. Volunteers were positive about their participation, perceiving it as a personally rewarding experience that they would recommend to others. Most felt appreciated by staff, residents and the program but several suggested that greater recognition and communication within the program, and increased training, induction and mentoring, would be beneficial. Delays in being allocated to a facility demotivated some volunteers. A number of volunteers expressed concerns over welfare issues for their dogs such as over-heating quickly in aged care facilities. Understanding the factors that motivate, or act as a barrier, to participation may help pet visitation programs to improve retention and the satisfaction of their volunteers.

Social workers' attachment to their pets and their impact on professional assessment regarding the roles pets play in clients' lives

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Two thirds of American households have at least one pet. Pets occupy important positions in people's lives. Nevertheless, little social work research has examined practices involving pets. This pilot study investigated what extent social workers assessed the roles pets play in clients' lives, and what factors contributed to such assessments. The hypothesis was social workers' attachment to their own pets would be positively correlated with the frequency of assessments of pets in clients' lives. A survey containing a newly constructed pet attachment scale (24 Likert items; proximity seeking, separation distress, safe haven, and secure base from attachment theory) was mailed to 100 randomly selected social workers in the northeastern United States. 29 respondents met the selection criteria: social workers in agency practice conducting client assessments (female=78.6%; white=92.9%; mean age=52). Of these, 20(69%) assessed the roles pets played in clients' lives. 7(29.2%) asked clients about pets as part of agency assessment protocol. A majority asked clients' pet names ($n=19$; 95%), types ($n=15$; 78.9%), and if pets were sources of pleasure ($n=16$; 84.2%), but fewer asked if pets were family members ($n=6$; 33.3%), or sources of stress ($n=7$; 41.2%). Twenty four (82.8%) social workers had their own pets in childhood and adulthood, 4(13.8 %) had pets in childhood, and 1(3.4%) had no pets. Those with pets in both childhood and adulthood had significantly higher pet attachment scores than those with pets in only childhood ($t(24)=2.06$, $p=.05$). The overall Cronbach alphas of the pet attachment scale in childhood and adulthood were .98 and .96 respectively, suggesting high internal consistency. The undstadardized coefficient of the social workers' pet attachment on the pet assessment frequency (.003) was not significant. One item on the pet attachment scale, "I missed my pet when he was not with me in childhood" was positively correlated with the pet assessment frequency (Person's correlation=.54, $p=.04$). This suggests that social workers who had pets in childhood, and felt separation distress were more likely to assess the roles pets play in clients' lives than other social workers. The full study, currently in process, will refine and expand these results.



IAHAIO
STOCKHOLM 2010

Workshops

International standards for animal-assisted intervention (AAI)

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Caredog School, Social, Vange, Sweden

Debra Buttram

AIUCA, Social, Bosisio Parina (LC), Italy

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Discussions have been going on for some time about creating an international umbrella organization for programs working in the field of animal-assisted intervention. Some of these discussions have taken place amongst members and associates of Assistance Dogs International (ADI). The reason is, that many assistance dog organisations have also developed AAI programs or are thinking about doing so. ADI has shown that programs with a common interest, working together to agreed standards, can greatly enhance the quality of client outcomes and encourage greater professionalism within the movement. ADI is keen to support the development of a sister organisation which focuses on AAI. It is hoped that the two organisations will have close links, building on the knowledge and experience that already exists.

A group of existing AAI programs are now actively looking to create an umbrella organisation with the following key aims:

- To encourage programs to share ideas, research findings and good practice.
- To set model minimum standards for AAI practice and activity.
- To develop an accreditation system that will recognise programs that are meeting the agreed standards.
- To encourage professionalism in all AAI activity.

At this session a first draft of the proposed minimum standards will be presented to delegates who are invited to offer comments and suggestions for improvement. The standards will focus on dogs, but should be applicable to other small species.

Standards are required for among other things:

- ethics regarding clients
- screening of dogs and handlers for suitability as AAI-teams before entering training
- training/education of dogs and handlers
- quality of dog trainers
- test for registration/certification
- policies and procedures for care units where AAI is used
- information and education for professional staff at the care units in the use of AAI.

The time is right for certification of animal-assisted interaction providers

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The incorporation of equines in a variety of human service and development programs, i.e. at-risk youth, trauma survivors and war veterans has led to increased interest in these programs. As a result, the field has reached a degree of momentum in which allied health and education professionals have begun to view the field with a degree of credibility and legitimacy.

Dedicated professionals have developed terminology, created methods and techniques, established ethics, published books, and created curricula to train new people coming into the field. There is, however, great variability between training programs offered by various organizations such as the degree of equestrian skills required, level of formal education, specific training in equine-human interactions, session documentation, and session methodology. Furthermore, individuals looking for training are better informed and are demanding high quality training and opportunities for national credentialing. The time was right to bring stakeholders together to develop a shared vision of professional standardization, evaluation, and oversight to enhance public confidence in the work of horse-human interactions.

The Certification Board for Equine Interaction Professionals (CBEIP), invited members of national equine interaction mental health and education organizations to develop an initial credentialing process. This exam was the first attempt to provide practitioners with an external evaluation of their competency in the field of equine-assisted interactions; give training and educational providers with external recognition of training quality and provide consumers with an external evaluation of provider skill.

This session provides an overview of the challenges and advances in the development of certification for animal interaction professionals. The session will discuss the challenges and benefits to the development of certification for providers of animal-assisted interactions and make recommendations for work with global partners. The session will also provide information regarding the differences between certificates, certification, and accreditation; review core competencies identified for educational and mental health professionals; and review the certification process for CBEIP.

The anatomy and physiology of human-animal research: how to design a “better study”

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Much criticism has been leveled at the design and implementation of human-animal interaction (HAI) research studies. This workshop addresses challenges in designing Human-Animal Interaction (HAI) research and presents a common sense approach to the many difficult choices involved in designing a successful study. The basic outline of the workshop includes:

- (1) the basic ingredients --research question, participants, measurements, hypotheses and sample size
- (2) design options--types of studies, use of existing data
- (3) implementation--skills, obstacles, and ethics

We will discuss particular challenges to research in this field, and suggest remedies where possible.

Owners and pets exercising together (opet): study design and biopsychosocial descriptors of dogs and their owners

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The health benefits of physical activity are well recognized; however only a small proportion of the population engages in the recommended physical activity levels. Lack of physical activity not only affects humans, but may also adversely impact the health of pet dogs. To improve the health of dogs and their owners, it may be beneficial for veterinarians to counsel owners to increase the time spent in physical activity with their dogs. In this ongoing study, we are exploring biopsychosocial relations between owners and their dogs by surveying and conducting biomedical and physical evaluations of 300 dog owners presenting to a tertiary veterinary clinic and conducting biomedical and physical evaluations of their dogs. We are then inviting 76 owners of overweight dogs to participate in a randomized controlled trial to test whether veterinarian brief counseling increases the activity level of the dog owners and impacts the health status of the owners and their dogs. These participants will wear a pedometer for 3 months after establishing a baseline physical activity levels. In this presentation we will review the purpose and design of the study and discuss the current status. Currently 46 dog owners who have completed phase 1 baseline assessment measures have an average body mass index of $M=28.8$ ($SD=7.4$) and they have reported total weekly METs of $M=2867$ ($SD=2481$). The body condition score of dogs has been measured to be $M=5.9$ ($SD=1.3$), where a score of 6 is suggestive of excess fat. Sixteen participants have entered the second phase of the study and have recorded an average number of steps of $M=7306$ ($SD=2850$) during their baseline assessment. These early data suggest that it is possible to recruit participants and target physical activity among dog owners in a veterinary clinic.

Animal assisted interventions' research – a call for a wider conceptualization of evidence

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- Is it fair to demand that studies on Animal Assisted Interventions (AAIs) meet the criteria for evidence as they are laid down in human medicine (EBM)?
- Are the EBM criteria relevant for all kinds of research on interactions between animals and human beings?
- Could a consort statement be created for what is considered sufficiently high standard in this multi-faceted and multi-disciplinary research area?

According to the IAHAIO Tokyo Declaration, scientific evidence supports the beneficial effects of interactions with companion animals for human health and wellbeing. The quality, of this evidence is, however, often questioned. In an attempt to reflect on relevant designs and methods in AAI research, a multi-disciplinary seminar series was held in collaboration between the Swedish University of Agricultural Sciences (SLU) and the Skaraborg Institute for Research and Development (SI) in Skövde, Sweden. Research on human and animal interaction is ongoing within the animal science and green care sector at SLU and in the human health sector at SI, but from different theoretical and empirical traditions.

In the workshop we want to introduce the topic by two short presentations. To involve the audience in the discussion we intend to present an outline of a consort statement to discuss in small groups and in the end of the session conclude how to continue the process.

Human-horse partnerships

Alexandra Franklin

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Building on a successful Working Group at the European Society of Rural Sociology (ESRS) Annual Congress in Vaasa, Finland in August 2009, called Equine Landscapes, a group of international social science researchers has come together to form a network called EqRN (Equine Research Network). The group includes sociologists, educators, anthropologists, geographers, and others with a social science interest in the human-horse partnership and its implications for health, education, rural development, national identities and social theory. The Themes discussed by the Working Group included:

- I: Performing Equine Landscapes – the symbolic and material production of time and space.
- II: Equine Landscapes of economic and social development, consumption of and in rural spaces.
- III: Gender & meaning: construction of the gendered self through equine activities.
- IV: Human-animal interaction: Embodiment; Learning, Discipline.
- V: Equine Landscapes – therapeutic landscapes and landscapes of recovery and recuperation.

In coming together we found that many of us felt isolated working on our interests in matters equine. The Working Group offered a chance for us to join together to mutually explore these interests and made us realize that together, our academic research could develop a critical mass which would increase understanding of the human horse partnership and of its implications for policy and practice as well.

We propose this session to further develop these themes and to expand the scope of social science interest in the partnership between humans and horses in all of its myriad aspects and implications.

Strong strides: integrating an evidence-based, family focused intervention with therapeutic equestrian activities

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Each year, over 12,000 children are diagnosed with cancer. Despite medical advances that have improved cancer cure rates, childhood malignancy continues to be the most common cause of death in children and adolescents. Today, the five-year survival rate for childhood cancer is close to 80%, but dealing with the medical problems does not stop when the cancer goes away. The stress that patients and families are burdened with continues long after the cure. Few treatment programs address pediatric medical trauma and its impact on current and long-term family functioning. There is growing recognition that new approaches to support a healthy return to family life are needed.

The Surviving Cancer Competently Intervention Program (SCCIP), an evidence-based program at the Children's Hospital of Philadelphia, is designed to address the posttraumatic stress of cancer in teen survivors and their families. Strong Strides integrates the evidence-based interventions of SCCIP with the long-standing therapeutic benefits of equine-assisted activities. Therapeutic equine activities provide a novel experience to foster personal growth, increase sense of dignity and self-worth, and breakdown communication barriers among family members.

The Strong Strides program aims to decrease symptoms of posttraumatic stress, to help family members identify additional coping strategies and improve communication skills, thus positively impacting family functioning. In addition, the Strong Strides experience increases resident and medical providers' understanding of pediatric medical trauma on patients and families and explores integrative methods of equine assisted activities for various illnesses and disabilities beyond the hospital or clinic setting.

Strong Strides is facilitated by an interdisciplinary group of health care professionals. Evaluation of the Strong Strides pilot program includes the Impact of Events Scale-Revised (IES-R) and the State-Trait Anxiety Inventory (STAI) in addition to measures of family functioning.

An integrative, interdisciplinary model of human-animal-relationships

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Kurt Kortschal

Konrad Lorenz Forschungsstelle and University of Vienna, Behavioral Biology, Grünau and Vienna

Based on the latest research as well as our own data we present an interdisciplinary, integrative model of human-animal relationships that combines and links the current knowledge from psychology, behavioral biology, psychophysiology, and endocrinology. Due to evolutionary history and convergent selection, structures and functions of behavior, physiology, and brain, which are relevant in a social context, are shared between humans and companion animal species. Maternal behavior and bonding between mother and infant occurs in all species. The peptide oxytocin is of importance in these types of interactive behaviours. It is released in the brain, where it e.g. exerts anxiolytic effects, decreases the activity in the HPA axis and the sympathetic nervous system. Oxytocin is e.g. released by closeness and touch. Attachment theory provides a bio-psychological concept that allows the integration of these psychophysiological, behavioral, and endocrinological findings. Attachment is a behavioral system that ensures that the child maintains or establishes proximity to the attachment figure, particularly when the child is stressed or in danger, and thus ultimately serves the protection of the children. However, children who were exposed to parental neglect, abuse, or inconsistent behavior, form an insecure attachment, which interferes with the effective regulation of stress and anxiety and with the ability to develop trustful relationships later in life. Since attachment patterns are generally transferred to other caregivers, these children are unable to accept social support from caregivers to the same extent as securely attached children. However, these children may engage in close and trusting relationships with pets, suggesting that insecure attachment patterns are not transferred to pets. Thus, relationships with animals may have a great potential to break the cycle of transmission and to promote regulation of stress and anxiety. Also in insecurely attached children, oxytocin may be released by petting and interaction with the pet. If a child develops a secure relationship with an animal assisting in a pedagogical or therapeutical setting it might also be easier for a teacher or therapist to establish a secure relationship with the child.

Breaking the transmission of insecure attachment-relationships

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The transmission of attachment patterns from one attachment relation to another is a standard in human-human relationships. Hence also insecure attachment patterns that children have developed with their parents normally get re-established in the children's relationships with professional caregivers, such as teachers or therapists. This is especially tragic for those children who have developed a disorganized attachment since this pattern jeopardizes their further development.

In our study we investigated whether insecure attachment patterns are transferred to pets or not. The sample consisted of 162 at-risk children age six to eight (85 boys and 77 girls). The generalized attachment representations of the children were assessed via the Separation Anxiety Test (SAT), the relationship to their own pet via a 14-item questionnaire (My Pet and I). Only 20% of the children had a secure attachment representation, and 66% showed a disorganized attachment. The data showed that the children's attachment to their pets was not related to their generalized attachment status

(ANOVA (secure/insecure): $t(df111)=.056$, $p=.955$; (organized/disorganized): $t(df120)=.572$, $p=.569$).

Furthermore, the distribution of the scores was negatively skewed, indicating that the children's relationships with their pets were rather close and trusting.

These results support the hypothesis that relationships with animals may have a great potential to break the transmission of insecure attachment. If a child develops a secure relationship with an animal assisting in a pedagogical or therapeutical setting it might also be easier for a teacher or therapist to establish a secure relationship with the child.

Stress reduction in children in the presence of a real dog, a stuffed toy dog, or a friendly adult

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The aim of this study was to investigate whether children with insecure/disorganized attachment can use a dog better than a human for stress regulation during a social stressor. This hypothesis is based on studies that show that insecure attachment representations, that are associated with low ability to regulate stress, are transferred to human figures but not to pets.

Thirty-one male children (age 7-12), selected via the Separation Anxiety Test (SAT) for insecure/disorganized attachment representation, were exposed to the Trierer Social Stress Test (TSST), a well established test inducing mild social stress in children. To measure induced stress during this test, saliva samples were collected at five times (t1=10 minutes before TSST; t2= 1 minute before TSST; t3= 1 minute after TSST, t4=15 minutes after TSST, t5= 30 minutes after TSST) and analyzed for cortisol. Subjects were randomly assigned to one of three conditions: Presence of a friendly adult, a real dog, or a stuffed toy dog.

Among the children with insecure/disorganized attachment, the lowest cortisol levels were obtained in the real dog group (N=11) when compared to the friendly adult (N=11) and stuffed toy dog (N=9) conditions. Subjects in the real dog group (N=11) showed significantly lower cortisol levels at t1, t4, and t5 (H-test by Kruskal-Wallis; t1: $\chi^2(df1)=6.39$, $p=.011$; t4: $\chi^2(df1)=4.15$, $p=.042$; t5: $\chi^2(df1)=5.13$; $p=.023$) compared to the friendly adult group. Area under the curve increase (AUCi) for the whole sampling time was significantly smaller for the real dog group when compared to the AUCi of the friendly adult and stuffed toy dog group (Kruskal-Wallis-Test: $\chi^2(df2)=15.17$, $p=.001$). These data suggest that children with insecure/disorganized attachment become calmer and can tolerate stress better in the presence of a friendly dog than in the presence of a human during a social stressor.

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A dog rather than a human reduces stress levels in insecurely attached children in a stressful social situation

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Facilitating effects of dogs have been shown in a range of activities and therapies. We presently show that dogs positively affect coping with a social stressor in children with insecure/disorganized attachment. Male children (age 7-12, N=75), were investigated for attachment representation via the Separation Anxiety Test (SAT) and exposed to the Trierer Social Stress Test (TSST), inducing mild social stress. Cortisol was measured by EIA from five saliva samples taken over the course of the session. Subjects were randomly assigned to one of three conditions: Social support by a friendly adult, by a real dog, or by a stuffed toy dog. Till Nov 2009, twenty subjects were behavior-coded (by GS, Observer, Noldus), ten from the dog group, ten more from the human support group. Children with the dog showed less cortisol increase in response to the TSST than the children with the human. Children had more body contact (Mann Whitney U: $p < 0.0001$), were more active ($p = 0.035$) and emotionally expressive ($p = 0.012$) in the presence of the dog than of the human. The more a child stroked, and talked to the dog, the lower his cortisol (Spearman's: $r_s = -0.66$; $p = 0.05$). Hence, a dog more efficiently supported these children in coping with social stress than a human. However, children differed in their ability to benefit: the more actively the child related to the dog, the greater the stress-dampening effect. Supported by a grant of the IEMTs Austria, Germany and Switzerland (DACH).

Toward a functional animal screening tool for animal-assisted interactions

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No activity involving animals compares with the intrinsically stressful social interaction that takes place in animal-assisted interaction sessions. No other animal-related event, no sport nor competition requires animals to enter the intimate zones of unfamiliar humans and remain there for several minutes or longer while an unfamiliar person engages in petting, hugging, or directing (training, riding) the animal. The role is new, specific, and profound (Butler, 2004). The individuals served by animals involved in today's animal-assisted interactions are often more chaotic and unpredictable than the settings for which most selection tools were designed. The limitations of current screening tools include the utilization of a "one size fits all" approach; focus on the setting rather than the population served; ignore the need for specific skills related to participant goals and objectives; and focus primarily on canine behavior and skills. Thus, it can be argued that current screening tools do not provide an accurate picture of the handler's and animal's 'fit' with participant goals or reflect the challenges encountered in settings in which animals actually work. This special session will provide an overview of the use of a functional animal screening tool for animal assisted interactions. The session will demonstrate the use of information about participant goals and objectives, session logistics, organizational climate, and species variables to develop an assessment process that reflects the realities of the work. Video and live demonstrations will be presented to illustrate how identification of the specific tasks required of animals in goal-directed animal-assisted interactions can enhance session outcomes. Attendees will learn how to:

- Identify the core competencies necessary for animal-assisted interaction teams serving specific participant populations
- Identify skill sets required for both animals and handlers working in goal directed AAI.
- Identify the functional differences between animals that work as resident animals, animal-assisted interaction teams working in public settings and animal-assisted interaction teams working in private settings.

Human-Animal Interaction Research: Child Development, Health and Therapeutic Interventions

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The HAI research field has matured over about 40 years from anecdotal studies and individual case histories to peer-reviewed science. Although scientific method is used in many of the studies, it often remains difficult to draw definitive conclusions. Small sample sizes, lack of statistical power and flawed design has ensured that the potential of the HAI field to deliver health benefits has yet to be fully realized. With two-thirds of all U.S. households having at least one companion animal, the promise of the field is such that a focus on quality is vital to ensure the theoretical work can be applied to greatest effect. This workshop will look at recent progress in this area of HAI research and present an update on developments. It is an excellent opportunity to meet with researchers who are interested or engaged in HAI research, to discuss opportunities within the field and to share information on previous workshops co-hosted by WALTHAM and the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD)

AAT as therapeutical mediation The empowerment of the self-control e of the Augmentative Communication for Deafblind Pluridisabled Children

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“Lega del Filo d'Oro” is a no profit Italian organization , wich cares about pluri-disabled, deaf blind children education, rehabilitation and their social placement. In the Osimo head office work a educational rehabilitative service, a diagnostic centre and a research national centre.

Pet Village has been dealing the man-animal relationship, in particular man-dog for 8 years now. Pet Village is also an Affiliate member of IAHAIO. Lega del Filo d'Oro and Pet Village Together are involved together in two national Research AAT Programs since 7 years:

- The first one regards the interaction and the relationship between dogs and children with severe behavioural disorders (violence, self-infliction of wounds). The target is to evaluate if and how AAT programs facilitates more self control competences and a better social adaptation, reducing deviant behaviours
- The second one regards the motivation to the relation with the dog can stimulate children with severe sensorial, neuromotorial and cognitive disorders,improoving communication and request actions for phisical contact and playng through technological instruments (switches e vocas) wich improoves the learning of ways of alternative and augmentative communication. The results of the research program shows very reassuring issues in the reduction of violence and self-infliction of wounds (as we can show by graphs) during the AAT Session (compared with different moments of the educative intervention). Positive results are shown also in the second Program: a significant increase of cominicative behaviours to request actively interactions, phisical contact and playing with the dog.

The workshop (which will last 2 hours) will be divided in parts: AAT and deafblind pluri-disabled children: the standard practice will be shown regarding the children involved in the Program : main features, limits and possibilities. Than we will present operating procedures and use of the psychometric instruments for the final evaluation of the AAT Program. Dog training and matching: this lecture will be about the trainig and the selection of the dogs involved in the programmes.

Educational videos about real AAT Programmes will be proposed during the workshop as a practical and working cue. An ask & answer session is provided.

Animal assisted therapy in Romania - an emerging field

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Animal welfare foundation VIER PFOTEN was founded in 1988 in Austria, by a handful of people whose main goal was “a world without animal suffering”. More than twenty years later it has become one of the largest and most active organizations of its kind in Europe, with offices in Austria, Germany, Netherlands, Switzerland, Hungary, United Kingdom, Romania and Bulgaria. VIER PFOTEN contributed to legislative reforms in Romania regarding animal rights, got involved in educating the new generations in respect to animals, addressed the stray dogs issue in Romania in a humane and efficiency oriented approach, and, through the “Dogs for People” project, started the first Animal Assisted Therapy project in Romania.

The Romanian office of VIER PFOTEN opened in 2000 from the need to address the stray dogs issue in Romania and to stop the brutal slaughter of the dogs by the authorities. Four years later, in 2004, the “Dogs for People” project started, as an original idea aimed to offering help to those in need, and to change mentality on the stray dogs, to show that with proper training and care, these animals can be beneficial to society. Stray dogs were selected under the supervision of a dog trainer, and trained to perform Animal Assisted Therapy. Later, the dogs, and the people started training to perform Canine Search and Rescue operations. The “Dogs for People” team offers AAT to handicapped institutionalized children, most of which are orphan. The weekly sessions are performed in close collaboration with the institution’s own psychologists and other therapists. Individualized goals and objectives are set according to the needs of every child. In most cases, given the fact that AAT is a complementary therapy the team is trying to help the attending therapists reach their own goals with the child, through the use of the dog. The dog is used as a motivational factor, “special friend”, object of projection or mediator of the therapeutic relationship. Special activities and games are designed to help the children develop and to reach their highest potential. As children evolve, the games and activities evolve too.

Depending on available time, we can present video footage of actual sessions, case studies and slideshows.

Advanced techniques of preparation, training and emotional protection to work with dogs at the service of the person

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This workshop has the objective of illustrate some advanced techniques that allow to optimize the result in the preparation and in the training of the service dogs and gives effective tools of emotional protection both for the dog and for the operator .

One of these techniques is from idealized by me and widely used with success from years in the preparation for service and assisting dogs. This technique is an alternative to the classic methodology of preparation that avoids the interaction and the disturbance during the training. This method on the contrary uses the spontaneous social interaction like instrument to tie and strengthen the relation.

I will illustrate also how to practically use the techniques of Agility and Mobility for the preparation of the dogs and the operators. These exercises increase the sense of responsibility and modify the point of view of the trainer and the operator who must adapt themselves to the requirements of the others and protect them in a difficult path.

I will illustrate also the phases of the cure of the relation that are really important in order to avoid emotional conflicts and to strengthen the tie and the self-esteem. During the work at the service of the person the operator can face delicate emotional phases, especially regarding the relationship with the dog. The objective is to supply - to the operator and the conductor - instruments to cross the conflicts and to detect the emotional dangers, protecting in this way both the dog and the client as well as the operator itself.

Animals in the Law - a Global Perspective - Update 2010

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In October 2004 the Foundation for the Animal in the Law presented in a Special Session its project “Animals in the Law – a Global Perspective” for the first time in the context of the 10th IAHAIO congress in Glasgow. The updated and further developed analysis was again subject of a workshop at the 11th congress in Tokio. The research showed that national and international legislation worldwide do not yet fully adopt the fact that animals can take an important role for human health and quality of human life. Based on 18 different criteria the legal standing of the human-animal-relationship in Germany, Austria, France, Italy, Spain, Great Britain, the USA and Switzerland were compared in 2004. The overall outcome of the presentation showed, that all researched states possessed some animal friendly norms in certain parts of their legislation (especially in civil law), but from an animal welfare perspective on the human-animal-relationship there are huge shortcomings in other areas of the law. In 2007 the number of countries was adjusted about the Netherlands, Greece, Denmark, New Zealand, Canada, Argentina, Japan, South Korea, China and South Africa. In 2010 the authors will present an important update of their studies. An expanded scheme with even more states will be showed with a compilation of their national regulations. The main goals of this legal comparision are to cultivate the understanding for the animal in the law worldwide and to help the states to support each other with the implementation of stricter norms.



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Poster Sessions

Adolescents' and pets. Prevalence and aspects of importance, health and socio-demographics - A Swedish study

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Background

It is more common to have a dog in families with children/adolescents aged 6-19 years in the USA, Australia and UK and studies from the USA show that socio-demographic characteristics are associated with pet ownership. The importance of the pet have highest rates among white adolescents without siblings, with moderate income or above and, being a dog- or cat-owner. To our knowledge no studies have explored the prevalence of pets among adolescents or their relationship to these, based on a general population in Europe.

Aims

The overall aim was to describe the prevalence and perceived importance of pets among adolescents in Sweden and explore if there were differences between gender and school-grades. Also, the study aimed to look for differences between adolescents with pets and non-pet owners regarding socio-demographics and aspects of health also considering school-grades.

Methods

The study was based on a survey carried out in a county in Sweden among adolescents in grade 7 (aged 13-14) and grade 9 (aged 15-16) in nine-year school and grade 2 (aged 17-28) in upper secondary school. Associations between importance of the pet and background variables were investigated using logistic regression analysis.

Results

A total of 8,709 respondents were included in the analysis (pet-owners = 5,793; non-pet owners = 2,916). The prevalence of pets among adolescents was 65 % and the most common types of pet were cats followed by dogs, rodents, aquariums/reptiles and horses. The importance of the pets was perceived as very or quite high over the three school grades (73.1-88.6 %). In general pets were most important for females. The perceived importance was also dependent on type of pet, with male and female dog owners and females with horses being the most attached pet owners. Adolescents with pets suffered more from mental health problems than non-pet-owners. Non-pet owners seemed generally to be more physically active than their peers with pets. Adolescents from Sweden or other Nordic countries, who lived in an owned apartment/house, and were living together with one biological parent or in an alternative living condition were more likely to have a pet than other adolescents from other countries and living under other conditions.

The suitable horses for human health in Equine facilitated activities and therapy-analysis of their gaits by acceleration spectrum

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Horses have been used for the human mental/physical health of any age in many institutions of the world. Although there are a lot of reports describing the effects of horses and/or horse ridings on the human health, the mechanisms what and how horses affect have not been cleared up yet. There are various possible stimuli for human body, in which 'the waggle' is generated from the gaits by horse riding. Most animal-assisted interventions using horses are anecdotally based on the hypothesis that 'the waggle' of horse riding would be resemble to human ambulation. The purpose of this study is to clarify the hypothesis and to demonstrate the optimum combination of the subject and the horse by 'the waggle' of horse riding.

Using four sets of equipments to measure 3 dimensional acceleration, we analyzed acceleration of walking in health human beings ($n = 17$; 4 males, 13 females, age = 20-25) and in horses ($n = 5$; age = 12-24) of 1 thoroughbred (male, 154cm in height), 1 Kiso (male, 141cm in height) and 3 half-bred breeds (3 females, each height are 119cm, 135cm and 155cm.). The results of accelerations spectrum in human walking were as follows: X (horizontally), frequency bands were 2.6-4.7 Hz in 2 major peaks, $1.2 \pm 1.2 \text{ m/s}^2$ (mean \pm SD); Y (verticality), 1.8-2.1 Hz and $2.2 \pm 1.9 \text{ m/s}^2$; Z (back and forth), 1.6-5.4 Hz in 2 major peaks, $1.5 \pm 1.4 \text{ m/s}^2$. Though the horse walking was different individually, the quality of walking in one thoroughbred and two half-bred breeds resembled to the human walking. For example, the thoroughbred was X (2.6-2.7Hz and $1.4 \pm 0.9 \text{ m/s}^2$), Y (1.1-0.8 Hz and $1.1 \pm 0.8 \text{ m/s}^2$) and Z (1.7-1.8 Hz and $1.8 \pm 1.3 \text{ m/s}^2$). However, Kiso, which is often used in Japan, wasn't (X, 1.9-2.1 Hz and $0.8 \pm 0.6 \text{ m/s}^2$; Y, 2.5-2.8 Hz and $0.6 \pm 0.5 \text{ m/s}^2$; Z, 1.3-1.4 Hz and $1.0 \pm 0.8 \text{ m/s}^2$).

The accelerations mean a gravity change, which would be physical stimuli for riding people. It is suggested that the similarities of accelerations between some horse gaits and the human walking could produce more benefit, especially for the people with physical disability. Therefore, we should consider the physical aspect of horse riding more scientifically.

Owners and pets exercising together(opet): metabolic benefits for both owner and dog

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Introduction

The health benefits of physical activity are well-known. Physical activity improves general well-being and reduces all-cause mortality. The current epidemic of obesity and overweight in dogs and their owner necessitates activity interventions (such as dog walking), to promote health of both dogs and their owners. Our study leverages the human-animal bond to increase physical activity for both pet owner (PO) and animal by specifically evaluating the relationship of PO weight and their dog and by examining veterinary-based counseling as a tool to promote activity for dogs and their owners.

Methods

This is two-phase blinded, prospective, randomized controlled study,. During Phase 1, PO self-reported activity data, height, weight, body mass index (BMI), glucose and lipoprotein profile are measured. Body condition scores and metabolic panels are obtained for companion dogs. During Phase 2, POs are randomly assigned to either a standard of care or a physical activity group (blinding still in effect). The activity group receives veterinarian-directed counseling designed to increase the companion dog's level of physical activity. Subjects return after three months and measurements repeated. The primary outcome of interest is physical activity. Secondary outcomes include weight and metabolic changes in both pet owner and animal.

Results

46 POs have completed Phase 1 and 17 completed Phase 2. Most participants are Caucasian females, with a mean age of 43 years and an average BMI of 29.4. Specific reductions in total cholesterol, low-density lipoprotein cholesterol, serum triglycerides serum glucose and body weight have been noted to date. Companion dogs' body conditioning score and weight significantly improved ($p = .04$).

Conclusions

Pet owners engaging in veterinarian-directed physical activity exhibit notable metabolic improvements after 3 months. The BCS and weight of the dogs improved as well. These findings have implications for cardiovascular health and wellness in both humans and their companion animals.

Dogs visiting elderly people: an ethological analysis of human behaviours and wellbeing

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The review of the literature on Animal-Assisted Therapy shows that twenty years have been needed to build its foundations. Numerous studies demonstrate that modifications in retirees life habits cause stress, however several cases tend to prove that the presence of a domestic animal is comforting, both at home and in institutions. We are standing at the tipping point of this practice. Indeed, the animal presence becomes more and more obvious as a complementary therapy. However, it is necessary to initiate evaluation processes to strengthen the theoretical bases of this type of therapy.

The present study aimed to evaluate the impacts of the animal presence on senior citizens welfare and wellbeing in rest-homes and geriatric departments. From February to June 2007, I followed volunteers visiting with their dog elderly people in five different institutions around Paris (two rest-homes and three geriatric hospitals). During 20 weeks, 14 men and 59 women (N=73) were observed. Visits were made in individual rooms and their mean duration was 9 minutes. Each resident was observed ten times in the presence of the dog and ten times in its absence on the basis of a pre-established behavioural repertoire. Each observation lasted 7 minutes. Then, an ethological analysis was conducted to compare the displayed behaviours in the two situations. The results showed a clear increase in the occurrence of positive behaviours (non-verbal behaviours, active relational behaviours and expressions of happiness (e.g. smiles or laughs)) and a decrease in the occurrence of negative behaviours (self-centred and non-social behaviours) when the dog was present versus in its absence.

It is therefore important to increase the number of similar studies to confirm these positive results and integrate them in a cross-disciplinary perspective (psychology, ethology, medicine, etc.).

Evaluation of social interactions between autistic children in the presence of the dog

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Introduction and justification

Many studies have shown a qualitative and quantitative deficit in the non-verbal, social behaviour of autistic children. Yet such skills are a prerequisite for the child to develop language, the symbolic function and socio-cognitive processes. Early care should target stimulating these crucial developmental skills. At the same time, certain studies have shown an increase in pro-social behaviour during activities when animals are present with children presenting such developmental trouble.

Objectives

1. To develop a tool for measuring triadic child-adult-animal interaction
2. To show that the animal is an attractive stimulus in itself.
3. To demonstrate the animal may be a good vector in mediation between the child and the person.

Methodology

We have worked with two autistic children, an unfamiliar person, a trained dog, and a neutral object in the observation room, which is equipped with two cameras. The unfamiliar person is limited to reacting to any solicitation coming from the child and the dog, who is in an immobile position lying down. For each child, the stimulus presentation was controlled and balanced across the experimental design. Each presentation is made according to the following procedures: pre-treatment (child/unfamiliar person), treatment (child/unfamiliar person /dog or object) and post-treatment (child/unfamiliar person). After setting up an ethogram, we evaluate quantitatively the behaviour (occurrences, frequency, length and reaction time).

Results

During the treatment, we have observed more interactions towards the animal as eye contact, physical contact, vocalizations and verbal behaviour relating to the dog. For one of the children, we observed a substantial increase in joint attention. During the post-treatment period, we have observed an increase in vocalisations and verbal behaviour relative to the animal.

Conclusion

Our tool is capable of measuring social and pro-social conduct of autistic children in the presence of animals. A dog, even an inactive one, is an attractive stimulus. Compared to the object, the dog brings the child to interacting on a more sophisticated communicative register.

Children's perceptions of a dog's friendliness based on physical characteristics: a comparison of gender, developmental level, and dog ownership

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Worldwide, the statistics on dog bites and children are alarming. By better understanding why a child may approach a dog could offer insight into improving dog bite prevention programs for children. The purpose of this study was to investigate children's perceptions of a dog's friendliness based on the dog's physical characteristics and explore any differences based on the child's gender, developmental level, and dog ownership status. The sample included 105 children (56 males and 49 females) enrolled in pre-kindergarten through 3rd grade (mean = 83 mos.) with 78% having at least 1 dog and 22% not having any pets. Children were individually interviewed and shown 14 photos of dogs (7 mixed breed and 7 pure breed.) For each photo, children rated the dog's "friendliness" according to a 5-pt. scale ("very friendly" to "very unfriendly"), adapted from the Wong-Baker FACES Pain Scale (1996) and created for this study. Children were probed about each dog's specific physical characteristics that lead to their rating. Children were then asked if they would pet the dog in each photo. Overall results indicated that children in the study consistently rated the friendliness of all 14 dogs in the same way. Four dogs were rated as "very friendly", nine as "friendly", and one as "both friendly and unfriendly." Children consistently highlighted the mouth/muzzle, eyes, and ears as the physical characteristics they used to evaluate the dog's friendliness. The only difference that emerged among any of the groups were specific physical characteristics of the Chow Chow (rated as both "friendly and unfriendly".) The fur texture, tail, and mouth/muzzle were perceived differently based on the child's developmental level. In summary, these results indicate that the children in this sample used the dogs' facial characteristics as a primary indicator for evaluating friendliness and they reported they would pet most all the dogs in the photos, regardless of their gender, developmental level, or dog ownership status. The information gained from this study could help to improve dog bite prevention programs for children by taking into consideration that children may initially evaluate a dog using facial features without taking into account the dog's overall body language.

Animal assisted activities in after school time with children at risk

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"Lesignola Laboratory" is a welfare cooperative society, based in Reggio Emilia (Italy), interested in marginal minors. Lesignola is the meeting point of a group of people, with different competences, who have a stimulating idea. The direct relationship of children and teenagers with animals can become a precious moment to encourage awareness towards feelings and emotions required for growing up, for easily expressing oneself and finding one's own integrity. In cooperation with Reggio Emilia Social Service Department, Lasignola has been implementing since 2003 projects with "GET", Territorial and Educational Groups, working in Reggio Emilia since 1988. These projects are run in after school time and are addressed to marginalized children and teenagers living in a situation of affective, relational and personal deprivation, problematic situations that often take to social and school maladjustment. We think that between people and animals there is a very particular interest that builds a great opportunity: "a place for restoration", where both people and animals are central characters who develop self-awareness and other-awareness. One of the main activity is to give a precise name to our emotions and to link them precisely to our needs, needs that very often are not so much clear to people, while they are very clear to animals.

Our meetings have the following steps:

1. Welcome
2. Animal acquaintance
3. Empathy activities
4. Symbolization
5. Conclusion

The meetings, structured following a precise ritual that foster the atmosphere of attention and safety, are organized in order to facilitate every afternoon the relationship between the children and a different kind of animal (dog, cat, rabbit, chicken, horse).

Starting from observing and on focusing on the acquaintance activities and messages codifications, we want to train the minors towards self-listening and listening to the animal. We want to end the educational path focusing the attention into translating the competences acquired into backgrounds of one's life.

The project has underlined how taking care of a rich and pleasant relationship with animals can:

- facilitate the opening up to diversity
- help the teenager to keep more quiet and to channel their energy in a appropriate way
- assist people to follow rul

Cultural perception of the dog as seen by students from different countries

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AAA programmes have been developing quite rapidly in several different institutions (social services, schools hospitals). As societies become more multicultural, views of the potential benefits or harmful effects of animals may vary according to different cultures. This may bring about ethical and technical problems for some of the activities organised.

The objective of our research is to assess the cultural impact at stake in the AAA, to specify its nature in order to facilitate the integration of all participants.

The research was conducted by the Public Health Department at the CHU (University Hospital Centre) in Clermont-Ferrand. A questionnaire was drawn up exploring the following areas of the status of the dog: his rights, the extent of his influence, his ability to provide physical and psychological assistance.

The questionnaire was then tested on a small group before being widely distributed by the University Medical Department to students from the city of Clermont-Ferrand.

523 students responded; they are comprised of 246 Europeans, 126 Asians, 73 North Africans and 78 sub-Saharan Africans.

Asian students view the potential benefits of the man-animal relationship in much the same way as young Europeans do (anthropomorphic perception). The type of animal concerned varies however. The dog and the rabbit, for example, in Western societies, may be viewed as a pet or as food. Students from Sub-Saharan and North Africa consider animals from a utilitarian perspective and often have negative (if not evil) views of man's relationship to the dog. They cannot imagine the dog in AAA activities to help patients.

The picture projective technique of attachment to companion animal (PACA): The relationship between PACA and companion animal attachment scale

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Over the past few decades, a considerable number of studies have been conducted on the developing scale of attachment to companion animal (CA). Most of the scales on the measuring attachment to CA have been Likert-formt questionnaire. Therefore, the main purpose of this study is to develop the picture projective technique of attachment to CA (PACA). The PACA can facilitate measurement of the relationship between owner and CA. More specifically, in order to collect necessary data for this study, questionnaires were undertaken with 133 undergraduate students who have a dog in Tokyo. The research questions of the present study were as follows: The first section is comprised of 34 Items six factors (the comfortable relationship, the emotionally supportive role, the social interactive facilitation role, the bonding role in a family, the acceptance role and the nurturance facilitation role) Companion Animal Attachment Scale (CAAS) (Hamano, 2002). In the second section, there was a picture of an owner and a dog with an open-ended speech bubble each to understand whether owner interacts with dog or not. This was named "Interaction and Not Interaction". SPSS was used for the date analysis. The six subscales score of CAAS served as the dependent variables. The independent variable was whether owner interacted with dog or not. The relation between CAAS and PACA was investigated. The two-sample (independent) t-test was calculated to prove difference of two group means. The means of Interaction and Not Interaction differed significantly at the .05 level. The results suggested that the Interaction group had significantly higher scores on three subscales (the comfortable relationship, the emotionally supportive role and the nurturance facilitation role) than the ones of Not Interaction. As the result, this study indicated that the PACA was capable to measure the attachment to dog. The replication of this present is necessary to improve adequacy.

Adolescents' experience of horseback riding as a leisure activity which promotes self-confidence and social functioning

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The purpose of this study was to assess if leisure activities with horses impact on adolescents' (13-18 years) own experience of self-confidence and social functioning. We distributed 500 questionnaires to riding schools and horse centres in all Norwegian counties, to be handed out to their adolescent riders. The survey consisted of 35 questions, mainly related to the adolescents' own experience of activities with the horse with four or five-point scales. We received 135 completed questionnaires, mainly from riding schools (83%). Among the respondents, 73% were 13-15 years old and 93% were girls. The results showed that 77% of the adolescents' were highly pleased and 20% were pleased with their leisure activity. Seventy-two percent had attended the same riding school for more than two years, and all replied that they had close friends at the riding school. Ninety-three percent reported to have good control over the horse when riding. Four out of five replied that riding got them in a much better mood. Eighty-five percent of the adolescents' experienced that riding a horse made them more self-secure, and to 71% of them the horse activities made it easier to undertake other tasks during leisure time. There was a significant correlation between having close friends at the riding school and the adolescents' experience of to what extent the activity served as a recreation from everyday life ($p=0.02$, Fisher's Exact Test). Physical contact with the horse was to a large extent important to 92% of the adolescents, and two-thirds reported that contact with the horse to a large or very large extent made it easier to seek contact with other people. Despite a low response rate the results indicate that contact with and mastering of the horse through leisure activities with horses, may contribute to improved self-confidence and social functioning.

The dog's appearance and action influencing on people's attitudes towards dogs

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Companion animals have considerable effects on the mental and physical human health. A dog is one of popular species for animal-assisted intervention(AAI). The various breeds and characteristics could make different impressions, which would cause different results in the AAI program. Therefore, we have to choose appropriate animals for AAI. In this study, we examined how the dogs' appearance and action influence on people's attitudes towards the dogs.

One hundred-thirty vet-students were collected in this study. Six breeds of dogs: golden retriever(GR), labrador retriever(LR), standard poodle(SP), shiba(S), toy poodle(TP) and papillon(P) were examined. They were selected because of the popularity, size and hair type. Following tests were conducted to investigate how the appearances, actions and characteristics of dogs' influence on their impressions. Test 1: looking at 6 pictures of the breeds. Test 2: contacting with 6 breeds freely for two minutes each. Test 3: learning about the dogs detail such as ages, sex, favorite things. After each test, students evaluated the likes or the dislikes of the dogs by visual analog scale, in which students marked on lines to show how much they like or dislike the dogs. Then, those were converted into scores. Students also answered reasons for the likes or the dislikes of the dogs. In the test 1, when students were asked the likes or the dislikes of the dogs, the average scores were: GR=2.84, LR=2.54, SP=1.06, S=2.95, TP=1.70 and P=1.71(the max/min score=4.5/-4.5). After contacting with each breed of dogs(test 2), the scores were significantly increased in SP, TP and P(GR=3.02, LR=2.50, SP1=2.80, SP2=2.90, S=3.25, TP=2.47 and P=3.13), compared with those in the test 1. Students gave some factors such as "the touch of hair" and "prettiness" for the reasons that their impression of the dogs was improved. In the test 2, SP and P showed the actions such as approaching to students, whose actions might improve students' attitude towards the dogs.

Our results suggest that the impression of dogs would be improved by the touch of hair, prettiness and the positive actions such as approaching to people, being pleased to be touched. Additional study would propose the suitable type of dogs for a particular subject in AAI programs.

A study on apathy tendency and college recognition of animal nursing department students

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In Japan, it has become a serious problem of an increase of a certain college student who suffers from a student-apathy condition such as spiritlessness from a social activity, indifference, and emotionlessness repeating a year without attending the class in the college (Tanaka and Suga, 2006; Ishimoto and Kurasawa, 2009). On the other hand, Egami and Yasunaga (2004) point out that the college students of nursing have the lower apathy tendency than the college students of other general departments. In this study, it made a comparison of the apathy tendency and the college recognition in animal nursing department students and non-animal nursing department students. Moreover, it was examined that the psychological influence of existence "animal" were clarified to the animal nursing department students through the practice experience of actually passing relations with the animal.

The subjects were 95 college students (49 animal nursing department students and 46 non-animal nursing department students; age of 19 to 23). The questionnaire was organized by the apathy psychological character questionnaire (Ishimoto and Kurasawa, and 2009) and the college recognition scale (Sugiura, Ozaki, Mizokami, and 2003). The animal nursing students were also asked for two questions about a meaning of animal for themselves and the influence on them.

As the results, it was seen non-significant difference about the student-apathy tendency according to departments the students belonged to, and both of the students had lower apathy tendency. However, it was statistically clear that the animal nursing department students stared at finding employment in the society more realistically and belonged to the college ($t=1.69$, $p<.10$) compared with the other. Furthermore, the animal nursing department students saw animals as psychologically positive influences (e.g., "Healed", "Relief", "Calm", "Warmth") through accumulating experiences of the animal interaction through the curriculum. Therefore, it was suggested that the students were able to learn to the specialty more spontaneously and to have the prospect to the future more easily.

Awareness of service dog issues amongst student of rehabilitation medicine

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With the passing of the Law Concerning Service Dogs for Persons With Disabilities in 2002, OT's and PT's have been mandated to become actively involved in the training of dogs for person with physical disabilities. Despite the enactment of the law medical personnel still lack even the most basic knowledge and understanding in this area. In order to look into the prospects of OT and PT participation in the process of service dog training in the future, a survey was conducted to assess the level of information held by students studying in this area.

Method: Survey Population: 156 students enrolled in OT/PT training courses at a medical college.(105 - PT, 51 - OT, average age 21)

A questionnaire was prepared with 16 questions designed to assess the amount of information a personal has concerning the training and use of Service dogs, as well as the existence of an access law.

The results showed that 81% of the surveyed student population knew of dogs assisting human disabilities, but only 15% were aware of mobility dogs as compared with 33% for guide dogs. 87% didn't know of the existence a national access law. Other items on the questionnaire included such things as perceived contents of work, funding and animal welfare element. Asked whether or not they would be interested in participating in activities concerning the training and placement of Service dogs , 63% of the students were "very enthusiastic" and an additional 44% were willing to consider the prospects if given the chance. The results of the survey revealed that really few students enrolled in OT/PT training were aware of the various details involved in the training and placement of Service dogs. However most students expressed positive feeling towards supporting the service dog initiative. Future prospects for medical participation in this field seems promising.

It was also revealed that 67% of those who had any information on mobility dogs had obtained said information from TV and 14% from the newspaper, emphasizing the need for responsible reporting by the media.

Companion animals in families of children with developmental disorders

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Previous studies on human-animal relationships in families raising children with developmental disorders (DD) have been based on mixed or heterogeneous samples differentiated only by the prevalent type of child impairment (physical, intellectual, emotional), or have been case-studies or small-sample reports of AAT-interventions.

We examined whether raising a child with a specific DD of genetic origin is associated with different parameters of pet-presence and child-interaction with companion animals in the family. Parents of 24 children with Williams syndrome (WS), 14 children with Down syndrome (DS) and 44 typically developing (TD) children between 3 and 6 years were interviewed about: the presence, number and types of pets in the household; whether the pets were acquired prior to or after the child's birth; the child's behavior toward pet and any responsibilities the child might have for the pet's care.

Group differences emerged between the WS and DS families relative to the presence and acquisition timing of the companion animal: more of the families with a WS child (71%) reported having pets (and a higher average per household, $M=2.8$, $sd=1.9$) compared to 46% of the families with DS children ($M=1.5$, $sd=.84$) and 57% of families with TD children. While 75% of the WS families acquired a pet after the birth of the child with WS, only 25% of the families with a child with DS did so. In the families with TD children the timing of pet acquisition was not related to children's birth. No significant group differences were found in children's behaviors toward companion animals. Although descriptive, these findings suggest that parents of children with different DDs may view the role and impact of a companion animal in the family differently, and it remains to be explained to what extent these differences are related to the specific behavioral profiles of their children with disabilities, the perception of their own psychological needs or a combination of different personal and contextual factors.

The translation and adaptation for Puerto Rico of the Owner-Pet Relationship Scale (Winefield & Chur-Hansen, 2006) with a sample of healthy older adults

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In Puerto Rico, there is an absence of assessment instruments that are culturally contextualized for the study of the human animal bond. Moreover, since the older adult population is the fastest demographically growing sector in the island, knowledge and research about their relationship with companion animals are needed. Acknowledging the need for culturally sensitive instruments that help in the measurement of the human-animal bond, more specifically pet attachment, a summary of the translation into Spanish for the Owner-Pet Relationship Scale (OPR), (Winefield & Chur-Hansen, 2006), and its adaptation process for the healthy older adults population (60+ years) in Puerto Rico is presented. The OPR (2006) was based on Bowlby's attachment theory (Bowlby, 1969). An adaptation of Brislin's method (1970) for cross-cultural research was used (translation, back-translation, and pilot study). This process is part of a larger study about pet attachment and general well being in older adults, living in the western region of Puerto Rico. Preliminary results related to the hypothesized relationship between pet attachment and general well being in the above-mentioned sample is discussed as well.

The Social Meaning of "Beef Cattle Farmer" in Japan – A Case Study of Beef Cattle Farmers in Hokkaido

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It is generally noted that religious taboos regarding food are not very strong in contemporary Japan. However, killing and eating animals had been prohibited in pre-modern Japan while rice farming was promoted as the main source of securing food for the country. Focusing on present-day Japanese cattle farmers and their relationships with cattle, today we can still observe a sense of respect toward the animals. This paper will focus on beef cattle farmers in the Okhotsk coastal region of Hokkaido, and analyze how they construct their knowledge and culture through maintaining relationships with the animals. In the Okhotsk coastal region, most of the farmers breed Holstein milk cows. Since Holstein cows were first introduced to Japan in 1889, Hokkaido has been well known for their breeding. In the 1960s, amid the period of high economic growth, the demand for consuming beef rapidly increased, and the Holstein were converted from milk cows to beef cattle. As a result, many farmers started to raise beef cattle, and have struggled with the dilemma of attachment to the animals and breeding them for meat production. Based on fieldwork research, this paper will delineate the process of identity construction among the beef cattle farmers. In particular, it focuses on interactions between people and animals, and clarifies its social implications.

A relationship between the personality of an owner and the aggression behavior of the dog

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Introduction

Most of the dog's owners in Japan think about their dogs as their family members. It is generally assumed that dog's behaviors are influenced by their experiences and environment. A previous study has suggested that the owner's personality and attitude affect the dog behavior (O'Farrell, 1995). Aggression is the behavior that most owners consider serious problem. The aim of this study was to investigate the effects of owner's personality on the dog's aggression.

Method

Two questionnaires were used in this study, NEO-Five Factor Inventory (NEO-FFI) and a part of Canine Behavioral Assessment & Research Questionnaire (C-BARQ). The NEO-FFI including 60 items measures normal adult personalities in five dimensions: neuroticism, extroversion, openness, agreeableness, and conscientiousness. Seven hundred and fifty-two women were collected, to avoid a gender bias of personality, and their ages were more than 30 years old (46.2 ± 8.1 , mean \pm S.D.). Participants were divided into 3 groups according to the score of each dimension. The questionnaires about dog's aggressive behavior were three categories (aggression to owner, aggression to other dogs, and aggression to unknown people) of C-BARQ.

Results

Three hundred and fifty-four answers were retained (recovery rate = 52%). Except for extroversion and conscientiousness, the other dimensions have significant relationship with the dog's aggression (positive relationship of neuroticism with the dog's aggression for owner and unknown people, $p < 0.01$; negative relationship of openness with the dog's aggression for owner, $p < 0.01$; negative relationship of agreeableness with the dog's aggression for unknown people, $p < 0.01$). The dogs kept by owner who scored higher (over 28) in neuroticism were more aggressive for their owner and unknown people, compared with the dogs kept by those who scored lower (under 20).

Conclusions

It is suggested that the owner's neuroticism, openness, and agreeableness would influence the dog's aggression for owner and unknown people. In addition, an owner could have chances that would prevent the dog's aggressive behavior, using the human personality inventory like NEO-FFI.

Quality and behavior of the man-dog relationship

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A research project at the Institute of Psychology, University of Bonn, closely examined the relationship quality between dogs and their owners as well as their interdependent behavior. Conducting a representative study of 2800 dog owners allowed the identification of criteria to measure the cross quality of man-dog relationships, whereby both subjects of this relationship were taken into account: man and dog. The research also focused on external conditions and factors that cause the quality of this relationship to be either low or high.

The high complexity of questions that needed answering required an empirical, two-step approach: 1. psychological pilot study including expert interviews (especially with behavioral biologists and ethologists) to explore the subject of the research, 2. standardised and representative study comprising of interviews with dog owners, a systematic observation of the man-dog behavioral relationship and interaction as well as an online survey.

The study found six indicators determining the quality of this interdependent relationship in general and operationalised them into measurable criteria for specific relationships (e.g. owner's satisfaction with the relationship, satisfaction of needs on the level of the dog, man-dog attachment, social acceptance of the dog, dog keeping expertise of the owner).

All in all it became clear that the quality of the man-dog relationship was shaped exclusively by the attitudes and behavioral patterns of the dog owners (e.g. behavior in dealing with information, levels of engaging in educating their dogs, overall attitude towards them).

It is a combination of certain attitudes and particular behavior patterns of the dog owners (e.g. lack of information, "humanising" the dog) that causes problems in the relationship and consequently a low-level relationship quality. In contrast to this, aspects on the level of the dog (e.g. size, age) or demographic factors of the owner (e.g. age, place of residence) do not have an impact on the quality of this relationship.

A grouping analysis finally allowed the classification of dog owners into three categories, which differ significantly in the dimensions of attitudes and behavioral patterns on the one hand and the quality of their man-dog relationship on the other.

Development of the child-dog relationship: Changes of children's feeling and its interaction with a dog.

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Developing the bond between an owner and the dog could be one of the important factors in order to maximize the dog's supportive function. Unsuccessful human-dog relationships often cause problems with their dogs' behaviors, which happen even in assistance dogs. Therefore, it is essential to find efficient ways to develop the good relationship between an owner and the dog. As an exploratory study, we investigated how the human's feelings toward dog and the human-dog relationship would be changed through the interaction.

Twelve children joined in one of the following programs once a week: a dog dance program in which 6 children learnt the technique to handle dogs for 5 weeks (Dance group) and an after school program in which the other children did homework and played with a dog for 3 months (Play group). These two programs were chosen to investigate the diversity in the 2 different interactions. Two dogs joined in the former program and one dog was used in the latter. In both programs, children gave a dog 10 commands and the success rate was measured. In addition, they answered Pet-attachment Index (PAI, Stallones et al., 1990) and questions such as how much they feel better the dog obeying their commands at the end of each class. Spearman's correlation coefficient by rank test and Mann-Whitney's U test were used for the statistical analysis.

This study showed that there was a significant relationship between PAI score and the consciousness about the dog obeying their own commands ($p=0.05$). The success rate for 10 commands was significantly higher in Dance group than in Play group ($p<0.01$).

These results indicate that the better people feel a dog obeying their commands, the more the attachment level increase. Although there was no diversity concerning PAI between 2 programs, it should keep studying what factors would affect on the development of the good relation between human and dogs.

The effect of animal assisted therapy on the emotional stability and improvement of self-esteem in the person with mental disorder

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The person with mental disorder such as schizophrenia suffers from progressing diseases as well as emotional and behavioral problems. Due to the frequent relapse and continuous medical treatment, the disease develops into a chronic state and most patients have a difficulty in adapting to society. So they repeatedly have a relapse and go back to the hospital again. As a result, patients often lack of blunted affect and emotional stability by being isolated from the society. Various programs can be provided to help patients improve social skills such as emotional expression.

In this paper, we studied how an AAT program using therapy dogs can help patients build emotional stabilities and improve self-esteem in collaboration with SAMSUNG Therapy Dog Center and four Halfway Houses. SAMSUNG Therapy Dog Center provided trained dogs to Halfway House managers who conducted an AAT program on their patients. The subjects were 72 (26 men and 46 women) schizophrenia who live in the Halfway Houses. We conducted once a week for 60 minutes each time, total 12 sessions from July to September 2009. The instruments used in the therapy sessions are the Emotional/Social Aspects of Loneliness and Isolation(ESLI), Index of Self-Esteem(ISE) and Happy-the Quality Of Life (Happy-QOL).

The results were as follows: First, we observed that their emotional expression improved by the therapy with ESLI measurements. Second, after subjects participated in the AAT program, the measured points increased and hence it showed that the AAT using therapy dogs brought a positive effect. Third, the AAT improved the quality of life for subjects with emotional stability and improvement of self-esteem. In summary, it is observed that there was an improvement in self-esteem and emotional stability of the schizophrenia by participating in the AAT program using therapy dogs. Finally there should be a continuing effort to develop an individual AAT program which works for each schizophrenia to improve their social function.

The effect of animal assisted therapy on the improvement of self-esteem in the non-disabled children with disabled siblings

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Non-disabled children with disabled siblings even at a young age often worry about their disabled siblings and find that their parents are always preoccupied with disabled siblings. As a result, they may have a difficulty to build up a positive self-esteem and demand more to their parents than children without disabled siblings. Based on previous studies, we found that the AAT using a therapy dog gives a positive effect such as a sociality and an emotional stability to autistic or disabled children. However, there have been no studies utilizing AAT for non-disabled children with disabled siblings.

In this paper, we studied the AAT using a therapy dog with Geumcheon Community Rehabilitation Center and SAMSUNG EVERLAND Therapy Dog Center in order to confirm the effect on the self-esteem improvement of non-disabled children.

Subjects were selected four (2 boys, 2 girls) elementary school students with disabled siblings. To apply AAT, SAMSUNG EVERLAND Therapy Dog Center planned the program and conducted once a week for 60 minutes each time, for the total of 10 sessions. The instruments used in this study were the Piers-Harris Children's Self-Concept Scale to measure a progress of the self-esteem, the Kinetic-House-Tree-Person (KHTP) to confirm psychological changes, the program diary, video recording and the interview to observe changes of the subjects' behavior.

The results were as follows: first, the measured points were increased in overall, by the minimum of 6 to the maximum of 48 points and it shows that the AAT using a therapy dog provided a positive effect. Second, it was observed through the KHTP, the children showed more positive emotion and stable state. Finally, subjects were observed to have positive changes in attitude through the program diary, the video recording, and the interview. They clearly built their own self-awareness after they had participated in the AAT program.

Based on such an analysis, the AAT using a therapy dog helps non-disabled siblings improve their self-esteem. In conclusion, we conclude that they improve a social relationship and interaction with their parents and friends by utilizing AAT program.

Preventing and fighting bullying at school with animals: an experimental project of A.A.A. with young people at risk

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The main target of this project is improving the adaptation of young "at risk" and student with disabilities to the school situation, promoting reflection and awareness on the integration of "different" people. I was interested in promoting changes in the socio-emotional experience of the subjects through contact with animals, to encourage self-esteem, sense of responsibility, empathy, awareness of the undertaken role, learning strategies to overcome and/or manage difficult situations of bullying, improving their help skills and expertise. I suggest that young "at risk" could acquire knowledge and social skills such as to deter them from their role as a bully in school, increasing their interest and wellbeing in the school context; I also suggested that A.A.A. could offer a contribution to the recovery of personal, autonomy and socio-relational skills of students with disabilities. The Animal Assisted Activities' intervention has been proposed as a means of recovering both the bully and the victim, to facilitate changes in the social-psychological sphere. In particular, the objective to stimulate and improve the pro social and empathic skills of these subjects "at risk" was reached as they experienced the role of "operators" with their fellows with disabilities, putting into practice the knowledge and the skills they acquired previously with proper ways to approach and support. Finally, the relationship established with the animals involved in the project has played a decisive role in the becoming of these students, as witnessed not only by their written papers, but also by those of their classmates and teachers. Any changes were also evaluated by measuring the self-esteem variable through a Self-Esteem Multidimensional Test (TMA; Bracken, 2003), utilized before and after the A.A.A. intervention. Analysis of results shows, in the emotional sphere, a trend towards increased values of self-esteem; it seems then that the intervention actually achieved the goal to make the subjects capable of recognizing and managing their emotions. This trend could mean that the intervention has caused a certain effect: a beginning of change, which has not reached significant levels only because the intervention lasted too shortly.

Animal Assisted Activity (AAA) for young adults with severe psycho-physical disabilities: 3 cases

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The aim of this programme is to provide Animal Assisted Activities (AAA) to adults affected by severe psycho-physical disabilities. Here 3 cases are presented:

- L. a 28 year old male affected by Sturge-weber syndrome and epilepsy. Objectives: promote sense of responsibility offering a continuing appointment in which he is attentive to the dog; sustain self-esteem; improve attention and interest in others; consolidate an adult identity through nurturing and taking care of.
- L. a 39 year old male with spastic tetraparesis and severe developmental disability with serious perceptive and linguistic impairments; Objectives: stimulate attention, curiosity and ability to participate in activities allowing increased possibility for interpersonal relations; allow less possibility for relational closure; promote sense of well-being and new sensory experiences through contact with dog.
- S. a 43 year old female with spastic tetraparesis, severe cognitive and motor deficits with limited communication (facial and eye expressions, crying, smiling and laughing, sighing). Objectives: foster new relations; contrast relational closure; encourage relaxed muscle tone; offer perceptual and sensory experiences and psychophysical well-being through direct contact and relaxation with the dog.

The AAA is coordinated, supervised and evaluated by the referent psychologist. Present in each of the weekly 30 minute individual sessions are the client, one of the centre's special needs educators and 1 Pet Partner handler-dog team (different dog for each client, depending interactions and the objectives programmed). The objectives for each individual are amply satisfied during the sessions and in many cases the conservation of benefits after the moment of interaction has been observed. Direct contact with the dogs, other than satisfying needs for affection, security and personal attention, favours interpersonal relationships, helps develop new channels of communication, promotes correct behaviour and respect of others, reduces stress and conflictuality, promotes relaxed muscle tone, helps have a sense of responsibility, improves self-esteem and in a sense of well-being. The first AAA was started in the centre in 2004. Due to the positive results, it has been repeated every year since.

Standards for advanced training for riding therapists – introduction in a funded and proven concept from Germany

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Introduction

The growing field of equine assisted intervention needs standards for the professionals who are working with clients and horses. They need a sound therapeutic background, practical implementations, accomplished handling with horses and supervision. Advanced trainings for professionals should be standardized over the European countries, but the variety of different therapeutic aspects and approaches should be respected.

Concept overview

The German Institut für Equine Assisted Therapy has developed a training for riding therapists on a psychological background and evaluated the concept in regard to a quality management system. All students of the training courses must have specific work-related and riding pre-conditions. The advanced training consists of 600 hours in presence classes and self-studies. Volumes focus i.a. on psychological and therapeutical basics, fundamentals to mental health problems and mental disabilities, therapeutic planning and documentation in riding therapy, working with families, specific assignment of horses with different mental handicaps and training of horses for therapeutic interventions. Guided placements and self-dependent case work assist the practical training.

Evaluation results

The results of the evaluation and quality management process is documented, workflow is described and contentment of course members. Guidelines for the advanced training of riding therapists are outlined to have a basis for a European discussion about training standards in the field of therapeutic horseback riding.

Dog assisted therapy for young people with pervasive developmental disorder: a pilot study

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Animal-assisted therapy (AAT) has been used as a therapeutic tool in various psychiatric populations and is claimed to have a variety of benefits. Indeed, the animal provides an important source of sensorial, motivational and socialising stimulation. Since this is particularly well adapted to the needs related to the autistic disorder, the present study aims to demonstrate the effectiveness of dog assisted therapy in reducing behavior disorders and consequently improving quality of life in young people with pervasive developmental disorder (PDD). Subjects are 6 young people aged 16 to 22 years old with a severe to profound intellectual disability, PDD and behavior disorders. Three have a 30 minutes interview per week with a psychologist and her dog for 12 months and with the psychologist alone for the 12 following months. The three other participants follow the same procedure but start with the psychologist alone situation. The behaviors disorders are evaluated with the Aberrant Behavior Checklist (ABC), which is completed in the beginning and every three months for the 24 months of the study. Preliminary results of ABC evaluations seem to show a more important decrease in behavior disorders during the year when the dog is present in therapy, compared to those observed during the year when the dog is absent. The study is in progress.

An effectiveness study of integrated animal-assisted therapy in the treatment of children with Autism Spectrum Disorders(ASD) and Mental Retardation (MR)

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The study's purpose is to evaluate the effectiveness of Animal-assisted Therapy as accompanying therapy during the treatment of one children's group with ASD and another group with MR, while also monitoring of well-being of the dogs involved. The hypotheses of this innovative, multidisciplinary, case-control pilot study is to improve the children skills in the behavior, affective- relational, communication and motor areas, while the dogs's hypotheses regards the modifications of parameters investigating stress induced by the activity. The two groups of children, aged between 4 and 12 years, were treated with biweekly individual twenty minutes sessions, associated to traditional psycho pedagogist rehabilitation treatment in Stella Maris Institute. Every child performed all the sessions with the same educational psychologist, dog-handler team. Video recording and international scales (CARS, Vineland) were used to evaluate the children at different times: pretreatment (T0), after 9 months (T1), after 18 months (end of treatment, T2). The dog-handler team involved, trained and evaluated as Pet Partners® were from the "Scuola Cani Guida per Ciechi" of Tuscany. This School financed the pilot study. The dogs in one monthly session were visited, blood and saliva were collected for monitoring respiratory and cardiac frequency, hemogram, cortisol, IgA, Reactive Oxygen Metabolites and Biological Antioxidant Potential. Preliminary results evidenced a better improvement of children with ASD than control group in communication area (average increase of mental age: 8,2 vs 1,7 months), motor skills (5,4 vs 1,8 months) and Cognitive Behavior Consistency (0,9 vs 0,2); children with MR showed a better rising than the control in communication area (10,7 vs 9,2). Therefore, AAT could be more effective in ASD than MR. Preliminary results, until 95th day, referring dogs showed a good adaptive about stress in according to d-ROMs (111,1 vs 67,6 U.CARR) and BAP (2080 vs 2148 fÝmoli/L).

Benefits of Animal Assisted Activity (AAA) for the decrease of stress and pain in children undergoing blood tests

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Objectives

To test the level of stress and pain of children who are undergoing an invasive exam and the anxiety of parents and to verify the benefits of AAA on children undergoing blood tests and their parents. The level of cortisol, a hormone that shows the level of stress, was taken into account. The research was carried out at the Centre for Blood Tests of the Meyer University Children's Hospital.

Sample

26 children between 4 and 11 years of age, as well as a parent; 13 children participated in a trial group with dog and the other 13 children in a control group without a dog.

Methods

A 'pet partner' and 2 unsterilized female Labradors of 5 and 8 years of age participated in the research. Children in the trial group interacted with the dog before, during and after the blood sample. Instruments used: blood sample; an instrument to verify the level of distress; a scale to measure pain; and a questionnaire to verify the level of anxiety of the parent.

Results put into evidence that the level of cortisol is in average lower in the trial group ($A = 9,63$), in relation to the control group ($A = 13,37$). Total distress decreased significantly in the trial group ($A = 14,15$) in relation to the control group ($A = 33,15$). Additionally, children in the trial group declared to have perceived a lower level of pain ($A = 4,69$) in relation to the control group ($A = 5,08$).

Conclusion

Taking into account the results, we can assert that AAA is a valid support system for children undergoing blood tests and it seems to be able to decrease the distress, possibly by reducing fear.

Animal-assisted therapy for persons with aphasia

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The purpose of this paper is to explore the effects and effectiveness of animal-assisted therapy for persons with aphasia. Three men with aphasia following left hemisphere strokes participated in this study. The men received one semester of traditional therapy followed by one semester of animal-assisted therapy. While both therapies were effective in that each participant met their goals, there were no significant differences between test results following traditional speech-language therapy and test results following animal-assisted therapy. Results of a client satisfaction questionnaire, however, indicated that each of the participants were more motivated, enjoyed the therapy sessions more, and felt that the atmosphere of the sessions were lighter and less stressed during animal-assisted therapy as compared to traditional therapy.

The impact of Animal Assisted Activity (AAA) in children with oncology diseases

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The research aims to assess the efficiency of AAA in Oncology-haematology at the Meyer University Children Hospital, by measuring the satisfaction of children/patients, parents and health staff. The hypothesis is that AAA can change the perception of children towards the hospital context and, consequently improve their emotional condition. The sample is 17 children with an average age of 8 years old.

Methods

The research took place during 1 year. The instruments used were: a satisfaction questionnaire about AAA for children, another for parents and one for health professionals; a test to verify the emotional condition of children (S.A.M.); an optional drawing and other. For the statistical analysis the t test by Student was used, with the aim to demonstrate pre and post-test results on the same sample. Results show that 100% of children welcome the presence of dogs in the ward. The S.A.M. test highlights that there is a significant difference ($p < 0,05$) between the average answers of children given in presence of the dog and in its absence. 8 drawings with dogs were collected. 75% of parents replied that they are completely in favour of the initiative and 94,1% perceived positive change in the behaviour of their own child when dogs were present. 100% of health staff were in favour of AAA and recognise its usefulness for children and parents (100%), as well as for health staff themselves (100%).

Conclusion

Results confirm that interaction with dogs influences the emotional condition of children and that the level of comfort, which they experience is greater when the dog is present. This is so much the case that children/patients describe most frequently the hospital context as positive, after having played with dogs, in comparison to when they have not done so.

Effects of service dogs on the social, language, and self-stimulatory behaviors of children with autism: a longitudinal study

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Autism Spectrum Disorder (ASD) is one of the most widely known developmental disorders of public and international concern with defining characteristics including self-stimulatory behaviors, a lack of social reciprocity, and language deficits. An innovative form of animal assisted therapy - the use of service dogs for children with autism - is gaining in popularity since these specially trained dogs appear to rapidly reduce the children's impulsivity, self-harm, mood swings, and social isolation through specific actions such as retrieving the child (when he/she are not tethered), crawling on the child to calm him/her, alerting parents, and responding to the child's verbal commands. This study aims to identify the degree to which these specially trained service dogs modify the social, language, and self-stimulatory behaviors specific to children with autism. The communication and behaviors of 12 children (10 males, 2 females; mean age 6.9 years at baseline) who received a service dog were assessed before and after receiving their service dog at 6-month intervals for 1.5 years. Parents completed the parent-report Pervasive Developmental Disorder Behavioral Inventory (PDDBI) as a baseline and follow-up measure of their child's level of functioning. Children were also video-taped immediately before and one week after receiving their service dog. Overall participants' scores are showing significant or trend improvement in maladaptive behaviors (e.g., ritualism, aggression, self-stimulatory behaviors) and Autism composite scores, while less improvement in adaptive behaviors (e.g., social communication skills). These data suggest that service dogs for children with autism promote reductions in maladaptive behaviors in a relatively quick, though enduring, period of time; more research is warranted to examine long-term changes to adaptive behaviors.

"Natura Amica" Project: History of an Animal Assisted Intervention Programme in an Italian Zoological Garden (Parco Natura Viva, Bussolengo, Verona Italy).

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Parco Natura Viva is a Zoological Garden situated in Bussolengo (Verona, Italy) near the Garda Lake: major aims are conservation of species at risk of extinction (and their natural habitat), research in the zoological field and environmental education.

In 2003 the Parco Natura Viva, due to the ever increasing number of handicapped people attending the facility, organized suitable activities to meet their needs. In 2004 the Natura Amica project was started: this programme involved small groups of handicapped children in three hour sessions dealing with a controlled and limited relation and interrelation with a few animals of the zoo. After this experience, the need to create a suitable work environment to avoid the mingling of zoo visitors-facility users, came up. Since 2005 a suitable area outside the zoo has been designed; it is near the zoo and in it live some animals trained to interact in a positive way with handicapped children.

In this space the users can move in complete freedom, they can access any area, so as to have a complete and involving experience with the animal world. The animals living in this area have been selected depending on the features of each species and of each individual. All animals besides the routine vaccines, underwent continuous veterinary examinations certifying their physical health. Animal stress level is closely monitored so as to be sure that they may never have unpredictable reactions, that they may not be dangerous to any of the users and to ensure their welfare.

Since 2005, we have started to work over several matters, proposing both actual animal assisted therapies and psycho educational animal assisted interventions. In 2006, when a heated area was added, we started to also work in winter. In 2009 more than 160 disabled children were included in animal assisted intervention programmes.

Pets in pediatrics - current status of animal-assisted interventions in pediatric hospitals in Germany

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More and more clinics worldwide offer animal-assisted activities (AAI) for their patients. Especially children seem to benefit from pet contact during inpatient treatment. Nevertheless many chief physicians are afraid of the potential risks of AAI. This study investigated for the first time the current distribution of pets and animals in pediatric hospitals across Germany and explored possible barriers. 330 clinics and departments of pediatrics in Germany were asked to participate. We developed a multiple choice questionnaire and addressed it explicitly to the chief physicians and hospital managers as they play an important role in the integration of AAT in a clinical setting. The multiple choice questionnaire contained 23 items pertaining to existing application of animals in any therapeutic context and possible objections and barriers to the implementation of animals in pediatric hospitals.

70 % (229) of the institutions responded. Currently only 38 hospitals integrate animals in their clinical environment although 89,5 % of the respondents assume strong positive effects of AAI on the patients. Only 19 % suppose no positive effects on the children. 58,3 % see also valuable effects on the parents. We also asked the raters to assess the efficiency of animal-assisted programs in their clinic. 44,7 % of the chief physicians evaluated the interventions as medium effective and 36,8 % as highly effective. 5,3 % could not estimate the effectiveness of AAI. Dogs and horses are predominantly used in animal-assisted interventions, all of them had a specific training for AAI. 82,5 % of the participating hospitals responded that they don't integrate animals or pets currently. But 40 % of them are principally interested in AAI. For clinicians and managers the most relevant obstacles were 1st hygienic concerns, 2nd additional burden for the clinical staff and 3rd health risks, e.g. allergies. 62,5 % of the chief physicians who were principally interested in AAI ask for more information about AAI whereas 69,0 % of those clinicians who are principally not interested in AAI were also not interested in further information. The question whether a clinic offers AAI seems to depend on the personal attitude of the chief physicians and hospital managers towards pets.

Opening my cage; animal assisted group therapy with mentally challenged youths

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Beit Rachel Strauss is a school for mentally challenged youths in Jerusalem. Their life stories are often heartbreaking; some were abandoned at birth, some victims of abuse, many emotionally rejected and many live with complicated family dynamics. Often society fails to recognize the emotional damage due to their life circumstances, or their need for psychotherapy of some form. Most of them grow up unable to recognize or express their emotions or pain despite the fact that it exists and it hurts. Most of them are never given the chance to dream of a different reality or worse realize that they have a right to dream or fantasize about a different life.

In the school's animal corner (AC), the animals are born into captivity. Most of them spend their lives in their cages completely dependent on us, their caregivers. Through the animals, their lifestyle, their homes and social circumstances, the youths are able to reflect on their own personal lives and limitations. In the AC, you do not need words; the youths, who have trouble expressing themselves verbally, have a medium that allows them to freely express and deal with personal issues, without the limitation of words.

A group of youths of various backgrounds met once a week in the school's AC. In time, the bond and trust that developed between the members, allowed them to open and face difficult and sensitive issues concerning their own personal homes and lives. With the support of their peers, each was able to reflect on his/her reality through an animal in the AC. They began to dream, fantasize and express their desires and difficulties as any other independent individual with wants and needs. And while recognizing that they could not change their reality, they decided that together they could change the reality for an animal in the AC; they took it upon themselves to build a "dream cage" for the school's snake, thus bridging the gap between fantasy and reality at least for those special moments in the animal corner.

Ethical aspects of re-homing companion animals: results of a Companion Animal Welfare Council inquiry.

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In 2008 CAWC surveyed six leading UK re-homing organisations. This revealed an upward trend of cat and dog admissions over the past three years. Between 2007 and 2008, the RSPCA reported a 57% overall rise in animals relinquished to them, from 7,347 to 11,586; a 33% increase for dogs and 50% for cats (Elliott, 2009). Cats Protection reported to CAWC a 77% increase in cats relinquished between January-April 2008 compared to January - April 2007.

The survey aimed to investigate the organisations' policies and ethical principles regarding:

- assessment and selection of suitable animals for re-homing
- preparation of the animals for re-homing
- assessment of prospective new homes and owners
- advice given to prospective owners
- knowledge and communication skills of the organisational staff
- follow up procedures after re-homing.

The ethical aspects of the re-homing policies are addressed. Re-homing decisions were based on a combination of practical inquiries and ethical criteria. Most organisations require that potential owners will not only provide good homes, but will also "care" about the animals. Assessments of prospective owners were in terms of well established ethical principles or commonsense intuitions. However, value judgements in the re-homing process will not only relate to perceptions of the animal's welfare; but extend to notions of integrity and dignity. Further, moral assessment will extend to prospective owners, their families and network of social connexions.

The ethical objective of re-homing organizations is to provide a 'permanent, caring and loving home'. This is inescapably connected to the pursuit of information and knowledge about the well being of the animal; that the potential love of animals must be linked to informed caring about them. Thus it would seem the ethical standpoint of re-homing organisations is that of 'care ethics', rather than the utilitarian position commonly associated with animal welfare science.

Key words: re-homing, rescue, policies, ethics, welfare, animal, care

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Environmental conditions interfere in the human-horse relationship: The example of riding schools.

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Human-animal relationships are based on a succession of interactions (positive or negative). Recent studies showed that horses are able to generalise their relationship with a specific person to other humans. In riding schools, horses are likely to be in touch with a wide variety of people, including young children. The quality of the human-horse relationship therefore is of a large importance for animals' and humans' (riders and caretakers) welfare and security. In the present study we compared reactions of horses from different riding schools towards humans in a variety of human-related tests.

Results show large differences in the reactions of horses towards humans according to the schools. These differences can be related to horses' housing (box / paddock, single / group...) and working (riders' postures, teachers' attitudes and behaviour) conditions.

The results are discussed in terms of management, welfare and their impact on the human-horse relationship.

Alba and Dolly: controversial pets in art and science

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This poster compares and contrasts the public controversy surrounding Eduardo Kac's transgenic artwork and the first mammal cloned from an adult somatic cell. In 2000, Kac provoked public debate when he commissioned a French laboratory to engineer a bioluminescent bunny called Alba. Alba was conceived by splicing a green fluorescent protein into the genome of an albino rabbit. Kac had planned to exhibit Alba in a gallery and subsequently adopt her as a family pet. However, following a dispute between artist and scientist, the laboratory reneged and Alba was not given to Kac. Dolly the sheep, on the other hand, was born a few years earlier in July 1996 at the Roslin Institute, Scotland. She was created by fusing a denucleated oocyte with the nucleus of a mammary cell from a six year old white sheep. Through natural conception, Dolly produced six off-springs including a set of twins and triplets. She developed severe arthritis and a progressive lung disease. Consequently, she was euthanased in February 2003 at the age of six and half. Both Alba and Dolly have acquired iconic status in contemporary art and science. Their conception has led to the development of numerous transgenic organisms and cloned animals for the purposes of pet-keeping and/or scientific research. This poster examines diverse interdisciplinary perspectives on animal-human relations through an analysis of the public debate concerning Alba and Dolly.

Oskar Heinroth's shared life with animals and the centenary of the founding of ethology, 1910-2010

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The year 2010 marks the centenary of the founding of ethology by Oskar Heinroth, who developed this branch of science's research methods and coined its main terms, including "ethology" and "to imprint".

Oskar Heinroth (1871-1945) developed his unique and holistic research methods thanks to the documentation of his thousands of observations of animals, with whom he lived 24 hours a day from childhood until his last days. His special and reciprocal relationship with animals enabled the documentation of their lives on the individual, group and family levels. In his close acquaintance with them, he served as a researcher and observer, but also as a colleague and partner to their lives from birth or hatching to death, and also in studying the reason for their death. He was closely familiar with the "personality" and family life of the animals. His holistic research examined the meaning of their sounds and movements, the different components of their behavior and their morphology. His comparative studies of animal and human behavior led him to the conclusion that human traits, behaviors and emotions could be studied and understood on the basis of understanding and learning about the behavior of animals.

His outstanding student was Konrad Lorenz, who learned all of his theories. The reciprocal relations and friendship between them were special and complex. Lorenz was Heinroth's ambassador and disseminator of his discoveries, his theories and his work methods in the research world. There are explanations and conjectures as to the question of why Oskar Heinroth has been forgotten, whereas his student won recognition and fame as the founder of ethology. There is no doubt that it was Heinroth's shared life with animals that enabled him to reach such an in-depth understanding of their behavior, and to effectively become the father of ethological research.

This abstract is based on a Research made in Department History, Philosophy and Sociology of Science. (2007). The Hebrew University of Jerusalem.

The Caredog School - A Swedish model for educating dogs, handlers, and professional staff

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Background

Before the Caredog School started in 2008, there were no structured programs in Sweden for animal-assisted intervention (AAI). The Swedish model is to a large extent based on the long experience of Delta Society. However, the Swedish conditions differ. Thus, it was decided that instead of voluntary work, the institutions should employ caredog teams. Furthermore, emphasis should be on methods for implementation of the model. This in turn meant that focus should be on close cooperation with national organizations that protect the interest of patient groups. Focus should not only be on training dogs and their handlers, but also on training of the staff at the care institutions.

Education method

The course extends over one year. During the first half, the teams who pass an entrance test are trained by caredog instructors towards clear goals. During the second half, the teams are trained together with licensed medical staff (registered nurses, physiotherapists, occupational therapists etc) from the institutions that have agreed to start using caredog teams. This training is partly theoretical, but also contains demonstrations and exercises. All staff at the units is informed about the use of AAI and its health effects. They all take part in making policies and procedures for their unit concerning hygiene, allergy, documentation etc. Finally, the dogs and handlers take a test, which - if passed - entitles them to become licensed caredog teams.

Results

During 2008-2010, 40 caredog teams were licensed, and 35 medical staff took part. The caredogs are now working at 30 units. The interest for the model has been extensive, and is growing. One important result is that the Asthma and Allergy Association is positive to the use of dogs in care institutions - if the dogs are used according to this model.

Conclusion

A longer (one year) education, where both handlers with dogs and professional staff take part has proven to be successful in implementing the use of dogs in the Swedish health care system. Positive health effects have been documented and research is under way. Doctors now prescribe dogs as a supplement to other treatments.

Animal assisted therapy: method or context

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The professionalization of AAT , in view of the current types of presented cases and in view of the huge demand for AAT, seems more than ever an urgent necessity.

Pioneers territories, as a rule, run the risk of being subjected to "pioneers fever", which again, can result in the quick duplication of methods with assistance of animals.

If we want , in the long term, keep AAT viable, than we will have to approach AAT as a context rather than a method. We then see AAT as a new welfare context in which animals, but not only animals, have a leading part. The ingredients of this context require special study. Possible ingredients of this context:

- Dissident comparing to a classic welfare context, in environment as well as in content.
- Contains biophilia elements so that the inherent curiosity for natural elements can be re-motivated. This way, animals induce the reconnection with the natural world.
- Contains true recognition of the needs of the working animals , and this by taking the original nature of the animal into account, according to the ethology-guidelines
- Contains universal symbols of consolidation/strength and attachment so that AAT can take place in a vacuum, a transit zone between old and new identity.
- Contains play and fun, for the client as well as for the animal.
- The context can reflect the animal as transitional medium into a therapeutic mirror.
- Contains enough integrity, privacy and possibilities for attachment/bonding

Conclusion: the implication of approaching AAT as a context rather than a method, can make AAT stronger in content and foundation. It will make us capable of creating really new AAT programs with all the ingredients the created context can offer. This process will surely contribute to the professionalization of AAT.

Animal anthropomorphism unravelled: Disentangling the multiplicity of definitions

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Given the widespread use of the term "anthropomorphism" in the field of human-animal interactions, it is important that we, as scholars, are clear in what we mean by the word. Disagreements over the acceptability of anthropomorphism have been linked to inconsistent understandings of the term. Dictionaries broadly define "anthropomorphism" as the attribution of human characteristics to nonhuman entities.

Conceptually, this is problematic, as philosophers have inconclusively debated the point of delineation between human and nonhuman for millennia. If we do not know what it means to be human, how do we know when we are attributing human characteristics to nonhuman entities? That is, operationally, how do we know anthropomorphism is occurring?

To address this question, I sought to document the conceptual and operational definitions of animal "anthropomorphism" used in peer-reviewed journal articles containing "anthropomorph*" (e.g., anthropomorphism, anthropomorphic) in the title. Content analysis revealed a range of conceptual definitions. I identified four mutually exclusive types of anthropomorphism discussed in the articles. They are: (1) physical (e.g., animals walking upright), (2) cognitive (e.g., attributions of intentionality or moral aptitudes), (3) affective (e.g., attributions of "human" emotions), or (4) cultural (e.g., animals wearing clothes). Authors' definitions included one or more of these types. Few articles explicitly stated their operational definitions. Many articles used the presence of conceptual terms or ideas (e.g., happy, sad, having intentionality, etc.) as a priori indicators for anthropomorphism without explicitly stating that they were doing so, suggesting an assumption that we are all in agreement as to what anthropomorphism includes. These findings show that multiple conceptual and operational definitions exist in the literature, illustrating the need for authors to be explicit in their use of "anthropomorphism". It is hoped that the four anthropomorphism types elicited from this study will aid authors in becoming more precise in their definitions of "anthropomorphism".